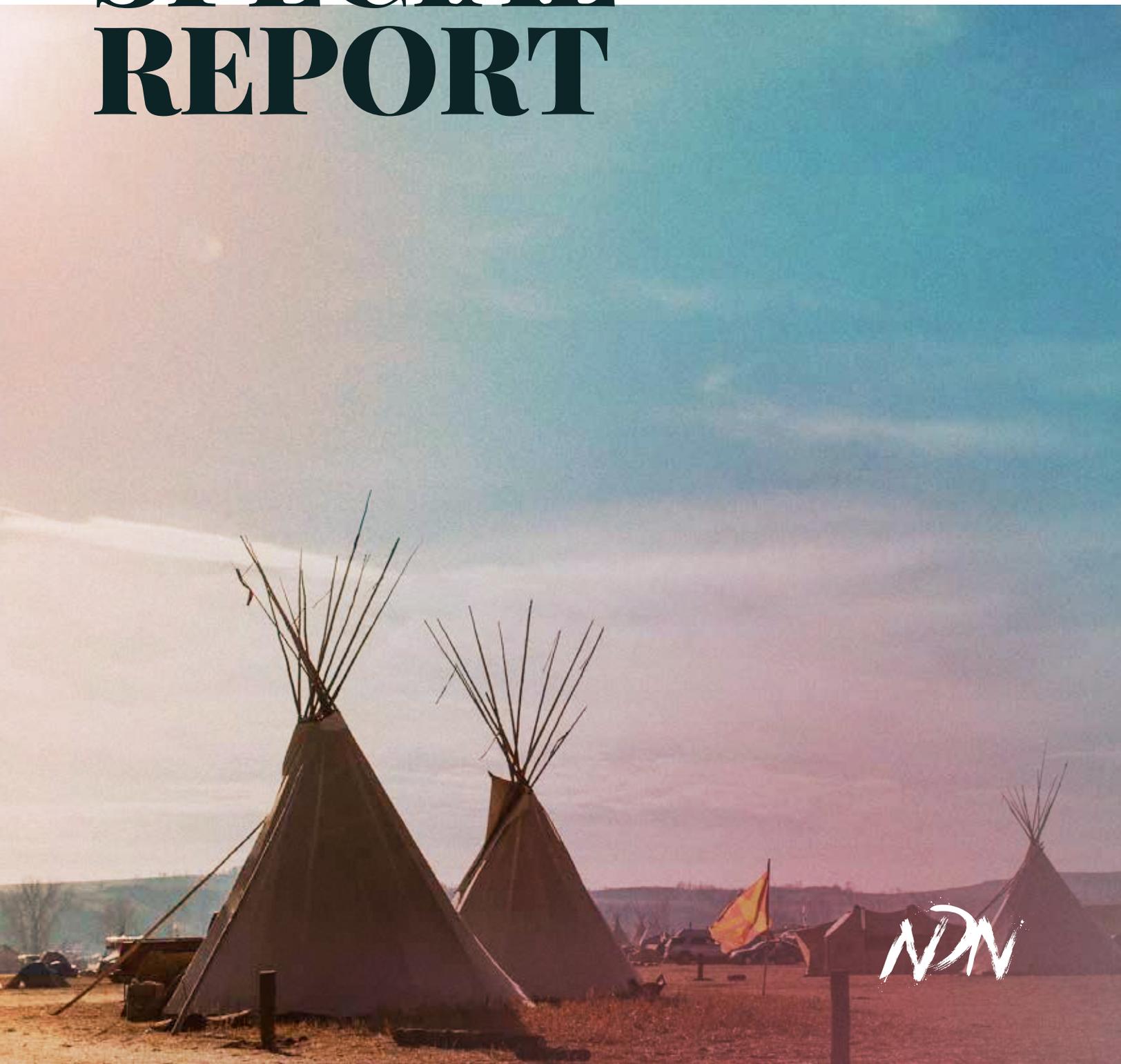


FAULTY INFRASTRUCTURE AND THE IMPACTS
OF THE DAKOTA ACCESS PIPELINE

MARCH 2022

SPECIAL REPORT



Faulty Infrastructure and the Impacts of the Dakota Access Pipeline

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List of Acronyms

ACHP	Advisory Council for Historic Preservation
AG	Attorney General
AIM	Algonquin Incremental Market
AIRFA	American Indian Religious Freedom Act
APA	Administrative Procedure Act
API	American Petroleum Institute
AR	Administrative Record
bbbl	barrels
bpd	barrels per day
BTEX	benzene, toluene, ethylbenzene, and xylene
CAA	Clean Air Act
CBD	Convention on Biological Diversity
CEO	Chief executive officer
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COVID-19	2019 novel coronavirus/2019-nCoV
CPM	Computational Pipeline Modeling
CRS	Congressional Research Service
CRST	Cheyenne River Sioux Tribe
CWA	Clean Water Act
D.C. Cir	District of Columbia Circuit Court of Appeals
D.D.C	District Court of District of Columbia
DAPL	Dakota Access Pipeline
DCD	Federal District Court of the District of Columbia
DEP	Pennsylvania Department of Environmental Protection
DOI	U.S. Department of the Interior
DOJ	U.S. Department of Justice
EA	Environmental Assessment
EC	environmental concerns
EIA	environmental impact assessment
EIS	Environmental Impact Statement
EO	Executive Order of the President

List of Acronyms (cont.)

EPA	Environmental Protection Agency
ERM	Environmental Resource Management, Inc.
ET	Energy Transfer (formerly Energy Transfer Partners)
ETCO	Energy Transfer Crude Oil Company
ETE	Energy Transfer Equity (company)
ETP	Energy Transfer Partners
EU	environmentally unsatisfactory
FERC	Federal Energy Regulatory Commission
FONSI	Finding of No Significant Impact
FPIC	Free Prior and Informed Consent
FR	Federal Register
FRP	Facility Response Plan
GAO	Government Accountability Office
GC	General Conditions
GHG	greenhouse gas
GHS	Globally Harmonized System
GIS	Geographic Information Systems
GRP	Geographic Response Plan
HDD	horizontal directional drilling
IACHR	Inter-American Commission on Human Rights
ICC	Illinois Commerce Commission
ID	Identification
ILO	International Labor Organization
IMP	Integrity Management Plan
IPCC	Intergovernmental Panel on Climate Change
IUB	Iowa Utilities Board
KXL	Keystone XL Pipeline
LLC	Limited Liability Company
LO	lack of objections
LP	Limited Partnership
LRAD	Long Range Acoustic Device
MCL	maximum contaminant level

List of Acronyms (cont.)

MCLG	maximum contaminant level goal
MLA	Mineral Leasing Act
MOC	Method of Characterization
NAEP	National Association of Environmental Professionals
NAGPRA	Native American Graves Protection and Repatriation Act
ND	North Dakota
NDPSC	North Dakota Public Service Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOI	Notice of Intent
NOPV	Notice of Probable Violation
NPRM	Notice of Proposed Rulemaking
NRDC	Natural Resources Defense Council
NWP	Nationwide Permit
OFA	Office of Federal Activities
OST	Oglala Sioux Tribe
P-PIC	Process Performance Improvement Consultants
PA	State of Pennsylvania
PCN	Pre-Construction Notification
PDEIS	Preliminary Draft Environmental Impact Statement
PHMSA	Pipeline and Hazardous Materials Safety Administration
RFRA	Religious Freedom Restoration Act
RHA	Rivers and Harbors Act
ROD	Record of Decision
ROW	right-of-way
RP	Recommended Practice (American Petroleum Institute)
RST	Rosebud Sioux Tribe
SCADA	Supervisory Control and Data Acquisition



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01. Introduction

01.1 Mni Wiconi: The Fight Against the Dakota Access Pipeline Has NOT Ended

The world will never forget the many Indian and non-Indian Water Protectors who stood strong and united in solidarity with the people of the Standing Rock, Cheyenne River, Oglala, and Yankton Sioux Nations in the fight against the Dakota Access Pipeline (DAPL).

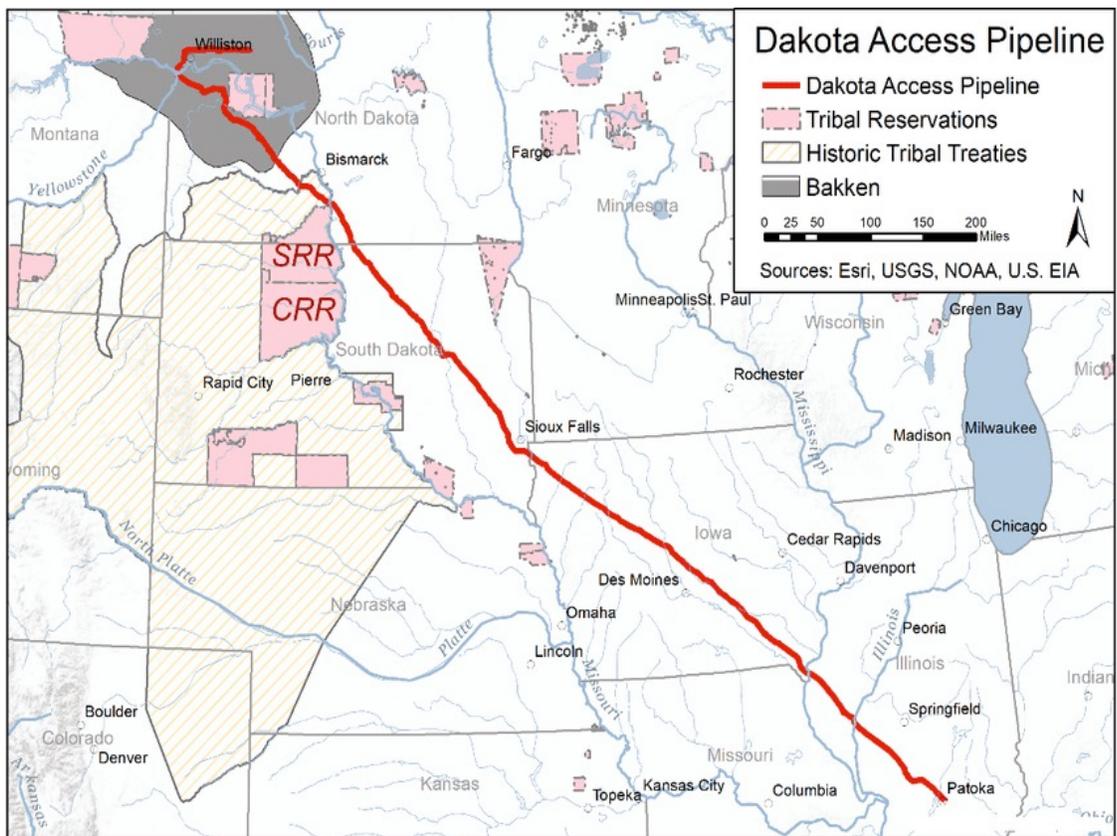
Even, now, though the five-year court battle (*Standing Rock Sioux Tribe et al. v. United States Army Corps of Engineers*) was dismissed in late June 2021 by the presiding federal Judge James E. Boasberg of the District Court of the District of Columbia ("D.C. District Court"), **the fight continues.**

And we still intend to win this fight... for Native people and their way of life, for the plants and animals, for the sacred Missouri waters that give life to us all, and for climate justice.

We ask you as a passionate Water Protector to read and familiarize yourself with NDN Collective's first-of-its-kind report. The report will provide you with insights into the important issues on treaty rights; the technical pipeline construction, operation, safety, and spill risk; and the Army Corps' environmental permitting and National Environmental Policy Act (NEPA) violations. By becoming more informed, we together can challenge the U.S. Army Corps of Engineers (USACE; hereinafter "Army Corps") to be transparent and comprehensive in the preparation of the court-ordered DAPL Environmental Impact Statement (EIS).

The EIS is well underway, and the Standing Rock, Cheyenne River, and Oglala Sioux received a preliminary Draft EIS (PDEIS) in July 2021. Not surprisingly, Tribes have rejected the PDEIS,

» Figure 1-1. The Dakota Access Pipeline project and unceded tribal treaty territory and reservation lands.



it is a near regurgitation of the Environmental Assessment (EA) the Army Corps originally used to justify their permit approvals for the DAPL in 2016. That failed process ignited Water Protectors to take a stand at Standing Rock while the Tribes also began their five-year legal fight in the D.C. District Court.

01.2 The Challenge to the Legitimacy of the DAPL on Indian Land

To quote from presiding D.C. District Court Judge James A. Boasberg's 31-page Memorandum Opinion of May 2021, "just like the Dakota Access Pipeline (**Figure 1-1**), which meanders over hill and dale before carrying its crude oil underneath Lake Oahe — a large reservoir on the Missouri River between North and South Dakota — the current litigation has wound its way through a myriad of twists and turns."¹ Just over 2,000 days have passed since the first wave of water protectors led by Indigenous women began unifying Indigenous and non-Indigenous people in solidarity with the Sioux Tribes. Still fresh in the minds of many are the violent law enforcement actions against the water protectors. More fresh and more alive is the beauty and power of the community of relatives who arrived at Standing Rock to say, "No!"

As the camps closed, the illegal construction of the DAPL continued across unceded and sacred land and water where millions of gallons of toxic Bakken crude now flow illegally every day. Thousands of water protectors faced water cannons, dogs, long range acoustic devices (LRADs), and heavily armed law enforcement. On another front, tribal leaders, attorneys, and the Tribes' technical experts battled to shut down the DAPL by facing the Army Corps and Energy Transfer (ET)/Dakota Access LLC (Dakota Access) in federal court in Washington, D.C. By June 2021, the official court docket had swelled to more than 600 legal briefs, motions, judicial opinions, and rulings. That record now includes more than 20,000 pages of supporting legal and technical documentation and declarations. Much to the Tribes' chagrin, Judge James E. Boasberg dismissed *Standing Rock Sioux Tribe v. Army Corps of Engineers* on June 22, 2021.^{2,3} Nevertheless, that decision is far from the last word in this fight to protect our Indigenous sovereignty and way of life. In dismissing the Sioux Tribes' case, Judge James E. Boasberg shifted the DAPL controversy to the Environmental Impact Statement (EIS) process he has now twice ordered the Army Corps to undertake. While the Army Corps won't likely complete the EIS until September 2022,⁴ it doesn't mean we stand waiting idly. And we won't be.

In the past, we have waited for the Army Corps to publish their impact analyses before taking action. Waiting is not an option anymore. We may not be standing together along the powerful and steady Missouri River in this moment, but Her sacred spirit gives us life and reminds us, too, to keep moving steadily and strongly to win this fight. ET, the parent company of Dakota

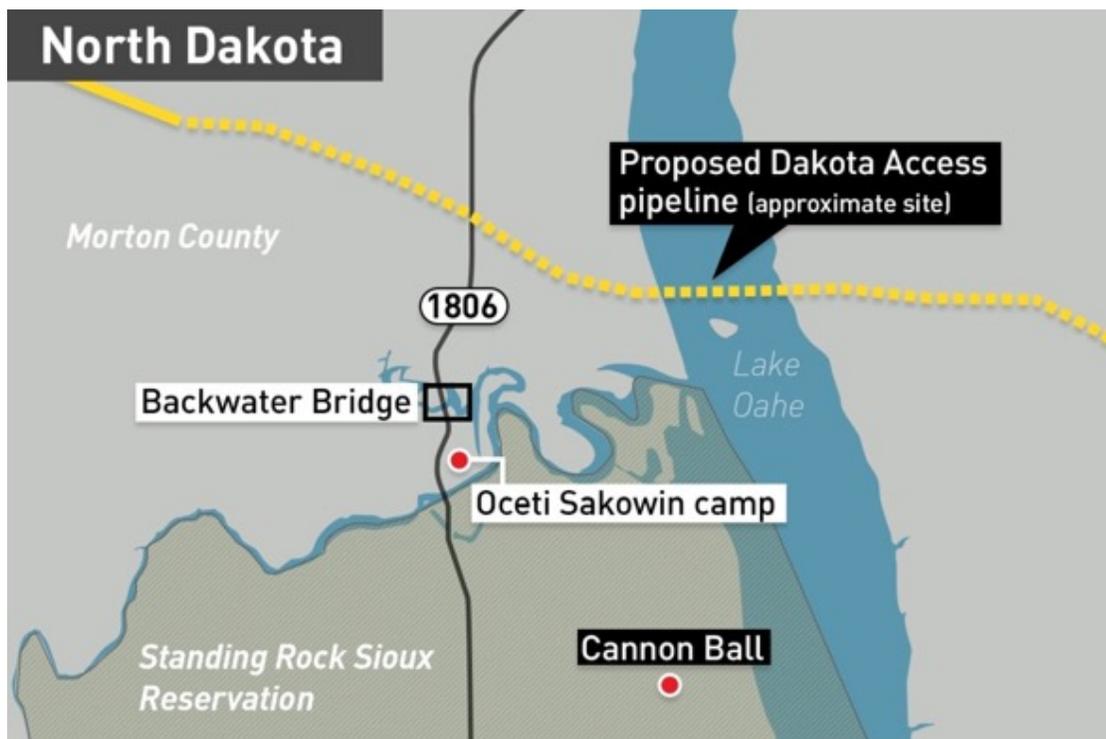
1 *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*, No. 1:16-cv-01534-JEB Document 607 (D.D.C. May 21, 2021).

2 *Id.* Document 1 (D.D.C. July 27, 2016).

3 *Id.* (D.D.C. June 22, 2021). MINUTE ORDER: Having considered the parties' 608 - 611 Status Reports, the Court ORDERS that: 1) In light of the Corps' monthly public updates and Plaintiffs' cooperating agency arrangements, the Court will not require independent updates or status reports; 2) All remaining outstanding counts are DISMISSED WITHOUT PREJUDICE, given Plaintiffs' lack of objection; 3) The Clerk shall TERMINATE this matter, but Plaintiffs may move to have it reopened in the event, for example, of a violation of the Court's prior Orders; and 4) Plaintiffs shall file a separate action if they wish to challenge the forthcoming EIS, which action they may mark as related to this one so that it will be assigned to this Court. So ORDERED by Judge James E. Boasberg on 6/22/2021. (lcjeb1)

4 *Id.* Document 610 (D.D.C. June 10, 2021).

» Figure 1-2. General location of the Lake Oahe crossing.



Access,⁵ first proposed the pipeline in 2014, and from that inglorious beginning, the DAPL controversy shone a light on the myriad of significant treaty, environmental, and social justice issues that have, for centuries, remained front and center for the Tribes and Indigenous people across the United States, Canada, and beyond. It cannot be understated that the DAPL represents a significant matter of not only human rights, but a matter of Indigenous rights. **The DAPL is a test of the federal government's integrity, not only to honor Indian treaties recognized under the U.S. Constitution, but also to honor our rights to free, prior, and informed consent (FPIC) as was declared in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).**⁶

At the center of the DAPL controversy is the 7,800-foot crossing below Lake Oahe, about 0.1 percent of the pipeline's total length Introduction and (Figure 1-2 and Figure 1-3). However, the engineering significance of this crossing cannot be underestimated due to it traversing a length underground beneath one of the largest freshwater bodies in the world.⁷ The complicated engineering and construction techniques required to drill and place a 30-inch diameter pipe in a tunnel 92 feet below the lakebed of the fourth largest man-made freshwater lake in the U.S. and ninth largest in the world, in a geologic area prone to landslides, shouldn't then surprise anyone.

Likewise, what also shouldn't surprise anyone, is that the margin of error in construction that creates conditions that could set the stage for significant impacts of this type, is small.⁸

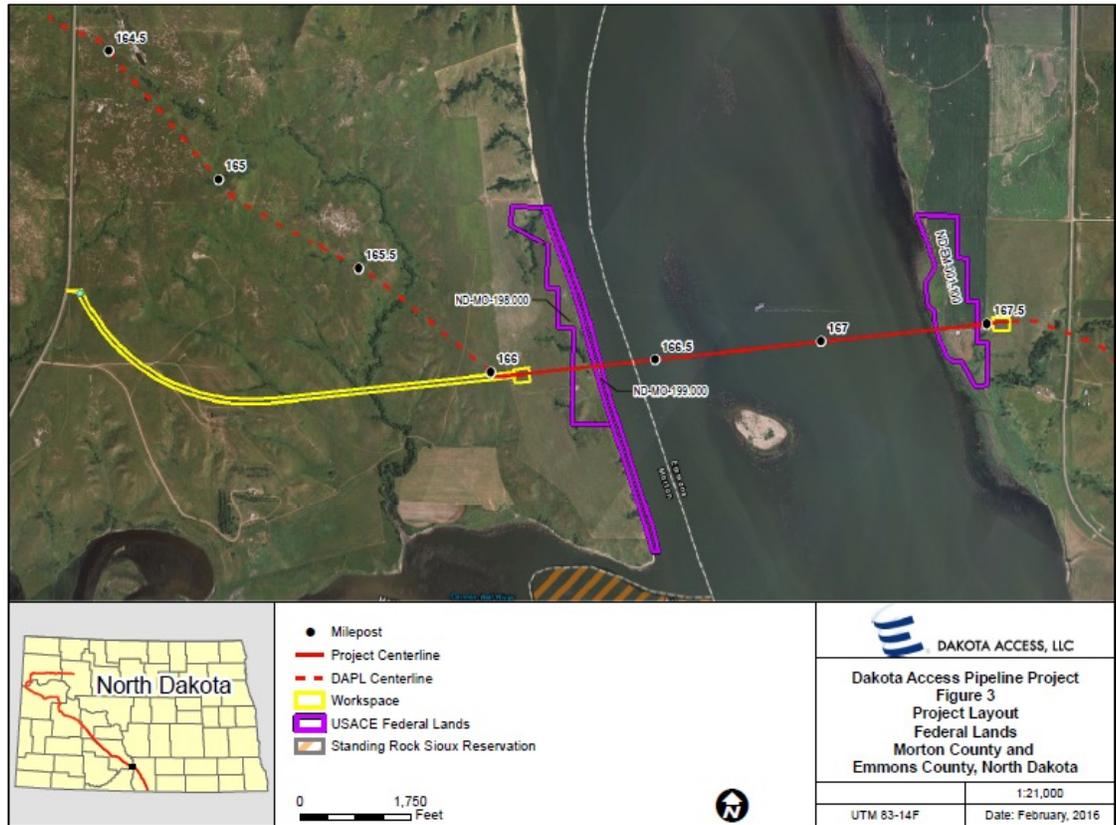
⁵ For ease of discussion, the report distinguishes between the Dakota Access Pipeline (DAPL) and its owner, Dakota Access, LLC (Dakota Access). Energy Transfer Partners (ETP), the owner of Dakota Access, LLC, also formally changed its name to Energy Transfer (ET) on April 21, 2021, to reflect a series of company mergers, sales, and acquisitions that preceded the DAPL.

⁶ FPIC is a principle protected by international human rights standards that state, 'all peoples have the right to self-determination' and - linked to the right to self-determination - 'all peoples have the right to freely pursue their economic, social and cultural development'. Backing FPIC are the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Convention on Biological Diversity and the International Labour Organization Convention 169, which are the most powerful and comprehensive international instruments that recognize the plights of Indigenous Peoples and defend their rights. See: <https://www.un.org/development/desa/indigenouspeoples/publications/2016/10/free-prior-and-informed-consent-an-indigenous-peoples-right-and-a-good-practice-for-local-communities-fao/>

⁷ ENVY. Technical and Safety Assessment, Routing, Construction, and Operation of the Dakota Access Pipeline in North Dakota. Report prepared for the Cheyenne River Sioux Tribe. (Jan. 5, 2016).

⁸ *Id.*

» Figure 1-3. Aerial photograph of the Lake Oahe crossing and the DAPL alignment.



Dakota Access' disregard and disdain for such an undertaking – and equal disdain and disregard for the Tribes' litany of concerns about potential significant impacts at the crossing site – are only too obvious when Dakota Access dismisses Lake Oahe as, “a small, man-made reservoir on the Missouri River, which is already crossed by many pipelines and utilities.”⁹

The issue is that the Tribes would be the ones to suffer the consequences of poor or faulty construction or lack of due diligence resulting in what may already, or could soon be, a long, slow leak of the pipeline. A major breach of the pipeline leading to a catastrophic event, while a lower probability, would permanently alter the availability of high-quality water that characterizes Lake Oahe and the Missouri River on which the SRST and the other Sioux Tribes depend for drinking water, agricultural use, and religious ceremony.^{10,11} Tribes historically suffered repeated financial, emotional, and psychological traumas from the forceful takings of their sacred lands by the federal government.¹² A consequential long, slow leak or spill would be a bigger threat to the culture and long-term viability of the Sioux Tribes that have already historically suffered repeated financial, emotional, and psychological traumas from the forceful takings of their sacred lands by the federal government. Additionally, the **DAPL crosses unceded tribal lands** that include numerous identified and many more known, but deliberately undocumented burial sites, sundance sites, and other elements with significant cultural and spiritual importance to the Sioux people and their relatives.¹³

⁹ *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*, 20-5197, Redacted Appellant Brief [No. 1858504] filed by Dakota Access LLC (D.C. Cir. Aug. 26, 2020).

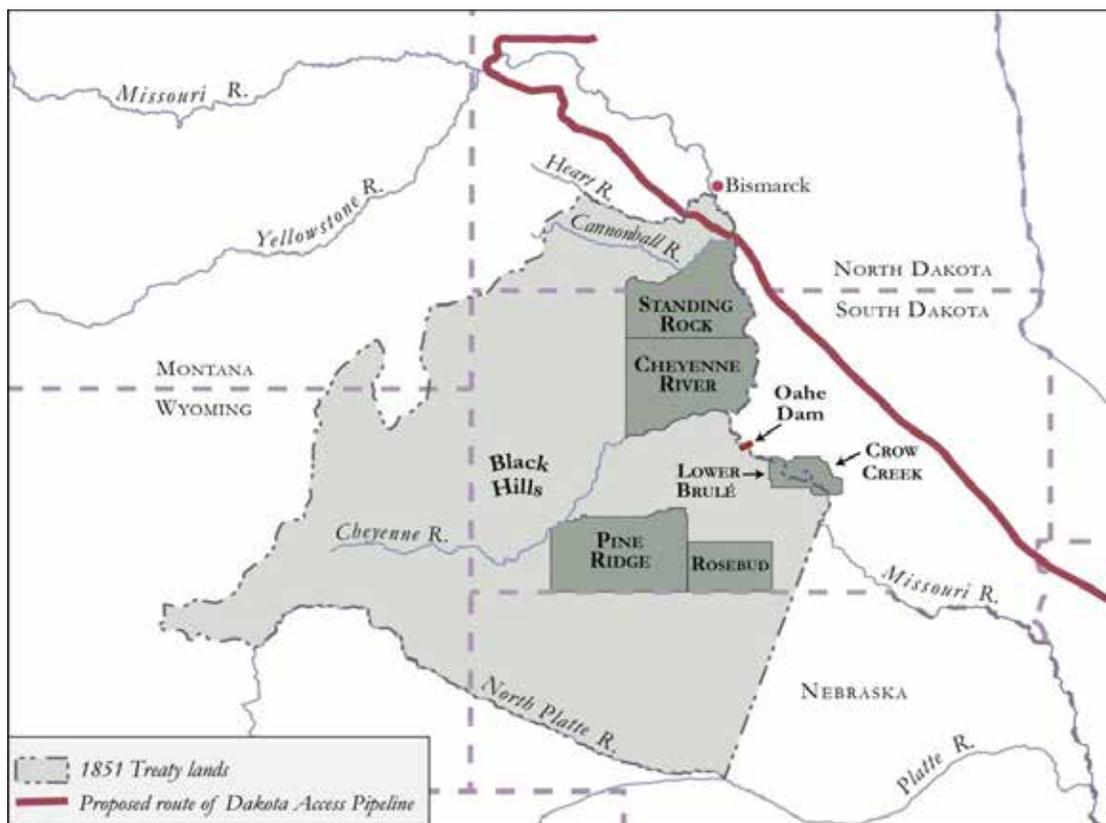
¹⁰ ENVY. Technical and Safety Assessment, Routing, Construction, and Operation of the Dakota Access Pipeline in North Dakota. Report prepared for the Cheyenne River Sioux Tribe. (Jan. 5, 2016).

¹¹ Ronald Rovenko, P.E. Evaluation of Proposed DAPL Crossing of Lake Oahe. Report prepared for the Cheyenne River Sioux Tribe. (Jan. 12, 2016).

¹² *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*, No. 1:16-cv-01534-JEB Document 496 (D.D.C. March 25, 2020).

¹³ “Unidentified” sites are defined as sites that may only be known through oral history and/or knowledge, many times passed on through many generations. These sites are unlikely to have been placed in the State or Tribal Historic Preservation Office (SHPO or THPO) database for any number of sacred reasons and/or traditions. For projects like the DAPL, this can often be a significant source of conflict between Indigenous people, who seek to maintain their legal rights under the Protection and Preservation of Traditional Religions of Native Americans (42 U.S.C. 1996) and the Religious Freedom Restoration Act (RFRA, 42 U.S.C. 21B, 1993), and non-Indigenous people who demand “proof” of such sites.

» Figure 1-4. The Dakota Access Pipeline in North Dakota, 1851 Fort Laramie Treaty lands, and Native Nations.



The Fort Laramie Treaty of 1851, also known as the Horse Creek Treaty, was signed on September 17, 1851, and ratified by the Senate on May 24, 1852 (Introduction).¹⁴ These lands, including those on federal, state, and private lands, are protected under the National Historic Preservation Act (NHPA)¹⁵ and the Native American Graves Protection and Repatriation Act (NAGPRA).¹⁶ The federal government, acting through the Army Corps, has authority over only 37 miles of the pipeline (~ three percent of the total pipeline length), where the pipeline crosses federal flowage easements over or under streams, rivers, and federal dams managed by the Army Corps.

In short, not since 1958 – when the federal government took and flooded 160,000 acres of the traditional and historic Missouri River bottomlands of the Sioux Tribes to build the dam that created Lake Oahe – has another infrastructure project been more threatening to tribal sovereignty, self-determination, and environmental and socioeconomic justice.^{17,18,19,20}

14 U.S. National Park Service – Scotts Bluff, Fort Laramie Treaty of 1851 (Horse Creek Treaty). Available at: <https://www.nps.gov/articles/000/horse-creek-treaty.htm> (Accessed on: Oct. 19, 2021). Map source: Jeffrey Ostler and Nick Estes. "The Supreme Law of the Land:" Standing Rock and the Dakota Access Pipeline, Shouldn't the U.S. obey the Constitution? Indian Country Today (Jan 16, 2017). <https://indiancountrytoday.com/archive/supreme-law-land-standing-rock-dakota-access-pipeline> (Accessed on: Oct. 19, 2021)

15 See 18 CFR §380.14 - Compliance with the National Historic Preservation Act. https://www.law.cornell.edu/cfr/text/18/380.14#a_2

16 See 43 CFR Part 10 §10.2 - Native American Graves Protection and Repatriation Regulations – Definitions <https://www.law.cornell.edu/cfr/text/43/10.2>

17 Andrew Rome. Black Snake on the Periphery: The Dakota Access Pipeline and Tribal Jurisdictional Sovereignty. North Dakota Law Review 2. University of North Dakota Law School. Vol. 1 No.1 (Jan. 1, 2018).

18 Kyle Powys Whyte. The Dakota Access Pipeline, Environmental Injustice, and U.S. Settler Colonialism. In *The Nature of Hope: Grassroots Organizing, Environmental Justice, and Political Change*. Edited by C. Miller and J. Crane, 320-337. University of Colorado Press. Boulder, Colorado. (2019).

19 Alina Yohannan. The Standing Rock Sioux Indians: An Inconvenience for Black Gold. University of Baltimore Journal of Land and Development: Vol. 6: Issue 1, Article 4. Available at: <https://scholarworks.law.ubalt.edu/ubjld/vol6/iss1/4/>

20 Carla F. Fredericks and Jesse D. Heibel. Standing Rock, the Sioux Treaties, and the Limits of the Supremacy Clause. University of Colorado Law Review. Colorado Law Scholarly Commons. 89 U. COLO. L. REV. 477 (2018), available at <https://scholar.law.colorado.edu/articles/1020>

One could reasonably argue that the DAPL project is continuing Indian dispossession, just 21st century style.^{21,22}

Both Dakota Access and the Army Corps have continued their public relations campaigns claiming that routing the DAPL project 0.55 miles from the SRST reservation boundary is the least environmentally damaging alternative because it is co-located and parallels the Northern Border Pipeline right-of-way, a natural gas pipeline built in 1982.²³ Furthermore, the Army Corps has asserted that the Lake Oahe crossing “is not injurious to the public interest” and “does not constitute a major federal action that would significantly affect the quality of the human environment” in terms of elements important to the Tribes, including but not limited to, surface water, ground water, cultural resources, and environmental justice.²⁴

Dakota Access have also attempted to double-down on their claims by stating that, 1) “DAPL is the safest, most environmentally friendly option for bringing to market around 40% of North Dakota’s, and 4.5% of the nation’s, crude oil production;” 2)...is “among the safest crude oil pipelines in the country...;” 3) and is also “one of the safest pipelines in the country,” having, despite operating illegally, incurred no spills on the 1,200-mile mainline—including the Lake Oahe crossing—and only seven small “incidents” at company facilities, “all remediated and none exceeding two barrels...”²⁵

Nonetheless, despite all the dramatic safety claims, the Army Corps and Dakota Access rejected routing the “most environmentally friendly and safest pipeline in the country” ten miles north of Bismarck on the basis of 1) needing to protect wells that serve the Bismarck municipal water supply from being too close to the “safest pipeline in the country,” 2) increasing Dakota Access’ construction and operation costs because that route would be about 11 miles longer than the crossing at Lake Oahe within 0.55 miles of the SRST Reservation, and 3) making it difficult to meet NDPSRC requirements to keep the pipeline 500 feet or more away from homes²⁶ in proximity to...oh yes... the “safest pipeline in the country.” This report thoroughly debunks those claims.

In late 2016, as the camps of water protectors had swelled near Cannonball, ND on the Standing Rock Reservation, Dave Archambault, Sr. (Standing Rock Sioux Tribe) and Stephanie Jerome (Turtle Mountain Band of Chippewa) began, in earnest, assembling a technical team of engineering, science, legal, and policy consulting experts. Archambault’s and Jerome’s mission was to ensure the Standing Rock and Cheyenne River Sioux Tribes had the highest level of expertise in the then ripe legal case against the Army Corps and ET/Dakota Access, LLC in the challenge to stop the construction of the DAPL across the Army Corps’ Lake Oahe easement, just north of the northern boundary of the Standing Rock Sioux Reservation – an area surrounded by sacred ground at and near the confluence of the Cannonball and Missouri rivers.

Consistent technical arguments provided by the Tribes and the SRST technical team continually raised questions about the analysis of the environmental justice issues and the

21 Julian Brave Noisecat and Anne Spice. *A History and Future of Resistance*. Jacobinmag.com (2016), Available at: <https://www.jacobinmag.com/2016/09/standing-rock-dakota-access-pipeline-protest/> Accessed: June 2, 2021.

22 Jaskiran Dhillon. *What Standing Rock Tells Us About Environmental Justice*. Items, Insights from the Social Sciences, Social Science Research Council (Dec. 5, 2017). Available at: <https://items.ssrc.org/just-environments/what-standing-rock-teaches-us-about-environmental-justice/> Accessed: June 2, 2021.

23 Final EA, Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands, at 16, 17, 25, 98 (July 25, 2016).

24 U.S. Army Corps of Engineers. *Final EA Amended and Mitigated FONSI, Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands*, at 6. (July 25, 2016).

25 *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*. Redacted opening brief of Dakota Access, LLC at 2,6, and 31, Document #1858504 (D.C. Cir. Aug. 28, 2020).

26 U.S. Army Corps of Engineers. *Final EA Amended and Mitigated FONSI, Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands*, at 8 (July 25, 2016).

safety and integrity of the construction and operation of the pipeline. Both the D.C. District Court and D.C. Circuit Court of Appeals agreed that claims and decisions made by the Army Corps and Dakota Access that the DAPL would have no significant impacts were dubious.^{27,28} Now, while the Army Corps is preparing an EIS under a third-party contract, the long history of the Army Corps and Dakota Access attempting to discredit the Tribes and their technical experts and consultants naturally raises questions about whether the EIS will meet NEPA's high legal bar of a "hard look."^{29,30} Or, like the third-party prepared EA before it, will it reach new heights of being "arbitrary and capricious?"^{31,32}

01.3 The DAPL is Unsafe and Dangerous

ET's DAPL in North Dakota, operated under its subsidiaries Dakota Access and Sunoco Logistics (Sunoco), has been operationally dangerous every minute of every day since beginning to flow toxic Bakken crude in 2017. The database of the Pipeline Hazardous Materials Safety Administration (PHMSA), the federal agency responsible for pipeline regulatory compliance, also makes it clear that ET/Dakota Access/Sunoco has spilled more crude oil than any of its competitors. From 2006 to 2017, ET and Sunoco incurred 291 hazardous liquid pipeline incidents – more than any other operator for that period in the PHMSA operator database – resulting in \$56,590,698 in property damage.

While these egregious safety records exist, ET and Sunoco prior performance has never been considered in a valid risk assessment, and the federal D.C. District Circuit Court of Appeals and D.C. District Court has allowed the DAPL to continue to flow toxic Bakken crude despite both courts affirming that the Army Corps – the agency responsible for conducting impact analysis under the National Environmental Policy Act (NEPA) – failed to disclose and sufficiently analyze the significant potential environmental and human impacts to the Tribes of the Great Sioux Nation.

The DAPL is without any legal right-of-way permits from the Army Corps to construct and operate under the Missouri River at Lake Oahe, 0.5 miles north of the Standing Rock Sioux Reservation. The illegal construction and operation under Lake Oahe and poor safety record also occurs while ET/Dakota Access/Sunoco have gained the approvals of the respective North Dakota, South Dakota, Iowa, and Illinois state public service commissions³³ to double the volume of Bakken crude in the DAPL to over 1.1 million barrels/day (46,200,000 gallons/day or the equivalent of fueling about 3.3 million cars and trucks for one day). As

27 *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*, No. 1:16-cv-01534-JEB Document 496 (D.D.C. March 25, 2020).

28 *Id.* 985 F.3d 1032 (D.C. Cir. 2021).

29 The hard look doctrine is a principle of administrative law whereby courts must examine the methodology and substance of agency decisions to ensure that they have adequate factual support. Congress did not require agencies to elevate environmental concerns over other appropriate considerations. Rather, it only required that the agency take a "hard look" at the environmental consequences before taking a major action. When preparing an EIS, an agency is "not required to select the course of action that best serves environmental justice, [but is] only [required] to take a 'hard look' at environmental justice issues." See: Monica Mercola. The Hard Look Doctrine: How Disparate Impact Theory Can Inform Agencies on Proper Implementation of NEPA Regulations. 28 J. L. & Pol'y 318. Available at: <https://brooklynworks.brooklaw.edu/jlp/vol28/iss1/7>. (Accessed on: May 14, 2021).

30 *Marble Mountain Audubon Society v. Rice*, 914 F. 2d 179 (9th Cir. 1990) and *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 109 S.Ct. 1835 (1989)

31 Like the hard look doctrine, the arbitrary and capricious is an administrative law standard that allows the courts to "assure itself that the agency has given a good faith consideration of to the environmental consequences of its actions." See: Peltz and Weinman, NEPA Threshold Determinations: A Framework of Analysis, 31 U. Miami L. REV. 71, 78 (1976).

32 *Baltimore Gas and Electric Co. v. Natural Resources Defense Council*, 462 U.S. 87 (1983)

33 North Dakota = North Dakota Public Service Commission (NDPSC); South Dakota = South Dakota Public Utilities Commission (SDPUC); Iowa = Iowa Utilities Board (IUB); Illinois = Illinois Commerce Commission (ICC).

of August 3, 2021, the DAPL volume in the illegal pipeline has reached 750,000 barrels/day (31,500,000 gallons/day).

Allowing the illegal and unpermitted operation of the DAPL continues to foment the existential threat to the environment and traditional culture of the Indigenous people whose livelihoods and spiritual relationship have been dependent upon the Missouri River for centuries. By downplaying the DAPL's technical integrity and safety issues, Dakota Access and the Army Corps are complicit in their continuance of the historical corporate and government policies, actions, and projects that erode the Constitutionally-guaranteed rights of American Indians to sovereignty and self-determination.

01.4 Need and Purpose for this Report

The need for this report comes in light of the somewhat surprising D.C. District Court decision on June 22, 2021 dismissing *Standing Rock Sioux Tribe v. Army Corps of Engineers*.³⁴ NDN Collective and its partners, for whom this report has been prepared, now have a need for specialized policy and pipeline technical knowledge and expertise as they begin to consider strategies to engage more directly in the next phase of ending the legacy of social and environmental injustice that has already been perpetrated by the illegal construction and operation of the DAPL.

The urgency under which this report is prepared has also been prompted as the Army Corps is currently in the process of preparing an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA).³⁵

The Army Corps – the lead federal agency responsible for the NEPA analysis and permitting of the project – had initially stated to the federal courts, Tribes, and public that the Final EIS would be completed in March 2022.^{36,37} On July 16, 2021, the Army Corps released a Preliminary Draft EIS (PDEIS) to the Standing Rock, Cheyenne River, and Oglala Sioux Tribes for comment by an Army Corps-imposed deadline of September 22, 2021. The three Tribes, who have attempted to actively participate in the development of the EIS and scrutinize the process as Cooperating Agencies under NEPA, rejected the PDEIS as completely inadequate, improper, and disrespectful to the Tribes.³⁸ The Army Corps has since announced that its appeal to extend the completion date for the EIS to September 2022 had been granted.³⁹ We

34 *Standing Rock Sioux Tribe v. United States Army Corps of Engineer.*, No. 1:16-cv-01534-JEB Minute Order (D.D.C. June 22, 2021)

35 Notice of Intent to Prepare an Environmental Impact Statement for an Easement to Cross Under Lake Oahe, North Dakota for a Fuel-Carrying Pipeline Right-Of-Way for a Portion of the Dakota Access, 85 Fed. Reg. 55842 (September 10, 2020). Available at: <https://www.federalregister.gov/documents/2020/09/10/2020-19993/notice-of-intent-to-prepare-an-environmental-impact-statement-for-an-easement-to-cross-under-lake>

36 *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, No. 1:16-cv-01534-JEB Document 601 Army Corps of Engineers, Status Report (D.D.C. May 3, 2021).

37 See: <https://www.nwo.usace.army.mil/Missions/Dam-and-Lake-Projects/Oil-and-Gas-Development/Dakota-Access-Pipeline/>

38 Letter to Colonel Mark Himes, Commander and District Engineer, Army Corps of Engineers from Mike Faith, Chairman, Standing Rock Sioux Tribe (Sept. 22, 2021). Available at: <https://earthjustice.org/sites/default/files/files/srst-ca-comment-2021-07-deis.pdf> (Accessed on: Sept. 22, 2021); Letter to Jaime Pinkham, Assistant Secretary of the Army for Public Works from Mike Faith, Chairman, Standing Rock Sioux Tribe; Kevin Killer, President, Oglala Sioux Tribe; and Harold Frazier, Chairman, Cheyenne River Sioux Tribe (Sept. 22 2021). Available at: https://earthjustice.org/sites/default/files/files/92221.threetribelettertocorps.dapl_eis_final_.pdf (Accessed on Sept. 22, 2021); D.K. Kumar. Tribes say Dakota Access oil pipeline's environmental review is biased. Reuters. (Sept. 22, 2021). Available at: <https://www.reuters.com/world/us/tribes-say-dakota-access-oil-pipelines-environmental-review-is-biased-2021-09-22/> (Accessed on: September 22, 2021); Tribes want Corps consultant drafting Dakota Access Pipeline EIS fired as biased. ENR Report. (Oct. 19, 2021). Available at: <https://www.enr.com/articles/52752-tribes-want-corps-consultant-drafting-dakota-access-pipeline-eis-fired-as-biased> (Accessed on: Oct. 20, 2021); Oglala Sioux Tribe Special Tribal Council Session with Army Corps of Engineers (Oct. 8, 2021). Available at: <https://www.facebook.com/THEOGLALANATION/videos/482240193489923/> (Accessed on: Oct. 12, 2021).

39 See: <https://www.nwo.usace.army.mil/Missions/Dam-and-Lake-Projects/Oil-and-Gas-Development/Dakota-Access-Pipeline/>

anticipate the Draft EIS would likely become available for a 45-day public comment period sometime in Spring or early Summer 2022.

The purpose of this report is to provide a comprehensive summary of the DAPL project in the context of the critical environmental, engineering, and social, economic, and climate justice issues that continue to plague the illegal permitting, construction, and operation of the pipeline.

Our purpose in creating this report is also to inform and engage Water Protectors on the facts and nuances that are not well known or well understood regarding:

1. **Tribal treaty rights.**
2. **Flaws in the technical engineering of the DAPL construction and operation that threaten Tribal treaty rights and sovereignty.**
3. **Six years of a failed Army Corps NEPA process with no proper transparency and diligent assessment** of the DAPL project; a process that continues in the current EIS analysis. Despite federal court rulings, the **Army Corps continues to:**
 - a. **Blatantly ignore the Tribes'** specific and legally-justified requests for detailed methodology and data that would allow the Tribes' experts to properly evaluate and challenge the DAPL's spill risk modeling and integrity management system (e.g., pipeline safety and emergency/facility response planning in the event of a spill).
 - b. **Lack transparency by continuing to withhold critical technical information** requested repeatedly by the Tribes while hiding under the guise of "national security."
 - c. **Utilize a highly-conflicted so-called "independent third-party" NEPA EIS contractor who previously prepared the biased Keystone XL EIS and who also has blatant financial ties to and advocacy for the oil and gas industry through membership in the industry lobby group, the American Petroleum Institute (API).**

Such behavior has made the Omaha District of the Army Corps nothing more than ET's/Dakota Access LLC's advocate by attempting to steer an unprecedentedly damaged EIS process that will allow the DAPL to continue to operate while adding to the burdens and trauma the Tribes of the Missouri River basin have historically suffered.

By getting to the heart of the real technical problems and nuanced issues of the DAPL in this report, we also go beyond the sometimes flawed or all-together dearth of information that have led to biases, mischaracterizations, and misinterpretations that is the noise that often appears in typical mass and social media sources.

01.5 Organization and Contents of the Report

The report is divided into five principal sections and two appendices.

Section 2, *Understanding Treaty Rights and the Dakota Access Pipeline*, provides a deeper discussion of the Sioux Treaty Rights, the Missouri River, Lake Oahe, and their relationship to the DAPL case today.

Section 3, *Trump Era NEPA and the Dakota Access Pipeline Project*, as the title suggests, focuses on the NEPA overhaul that occurred late in the Trump administration and how the action is likely to impact the Army Corps' handling of the DAPL EIS. As of the date of this report, there is some anticipation that the Army Corps may release the Draft EIS in Spring or early Summer 2022. Section 3 also discusses the Biden Era Executive Orders and how those changes could influence the DAPL EIS overall regarding climate change, potential legal conflicts with Biden Executive Orders, and other potential litigation being pursued by various groups over the Trump NEPA changes.

Section 4, *Standing Rock Sioux Tribe v. Army Corps of Engineers* begins with a narrative overview of the litigation of the DAPL project, followed by a broad narrative overview of the key dates in the litigation year by year, from the filing of the initial complaint by the Standing Rock Sioux Tribe on July 27, 2016, through the dismissal of *Standing Rock Sioux Tribe v. Army Corps of Engineers* in June 2021.

Section 5, *DAPL Technical Siting, Construction, Operation, and Safety Issues* follows on from Section 4 by focusing on four issue areas: pipeline construction and the horizontal directional drilling at Lake Oahe; pipeline routing and alternatives; spill risks, safety, and emergency response issues; and environmental justice. These issues are framed in the context of the D.C. District Court's rulings beginning in June 2017, where Judge James Boasberg remanded the Army Corps to address the "significant" deficiencies in the EA regarding tribal treaty hunting and fishing rights, spill risks, and environmental justice.

Four main reports published by the technical teams working on behalf of the SRST and CRST are front and center as part of the analysis and discussion in Section 5. These include:

- + ENVY. *Technical and Safety Assessment, Routing, Construction, and Operation of the Dakota Access Pipeline in North Dakota*. Report prepared for the Cheyenne River Sioux Tribe (Jan. 5, 2017) (hereinafter, "Envy Report").
- + Standing Rock Sioux Tribe. *Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux Tribe*. Report submitted to the Army Corps of Engineers for consideration in the remand analysis (Feb. 21, 2018) (hereinafter, "SRST Spill Report").
- + Standing Rock Sioux Tribe and Standing Rock Sioux Tribe Technical Team. *Report Addressing Deficiencies in the Corps of Engineers' Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe*. Report prepared for the Standing Rock Sioux Tribe in response to *Standing Rock Sioux Tribe v. Army Corps of Engineers* (Feb. 5, 2019) (hereinafter, "SRST Remand Report").

- ✦ Donald S. Holmstrom, Esq. *Safety and Environmental Impact Analysis of the Energy Transfer's Dakota Access Pipeline Report to the Standing Rock Sioux Tribe*. Declaration submitted on behalf of the Standing Rock Sioux Tribe in *Standing Rock Sioux Tribe v. Army Corps of Engineers* (November 24, 2019) (hereinafter, "*Holmstrom Report*").

A fifth report was issued by the Army Corps, *Analysis of the Issue Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe* (August 31, 2018) (hereinafter, "*Analysis of Issues*") is discussed and critiqued in the context of the four reports published by the Tribes.

Sections 4 and 5 of the report also highlight those issues that while argued before the D.C. District Court (D.C.D.) and D.C. Circuit Court of Appeals (D.C. Cir.) have a much higher probability for resurfacing and being litigated again once the Final EIS has been published, presumably in September 2022.

The federal Public Access to Court Electronic Records (PACER) system contains just over 600 document titles representing upwards of 10,000 pages in the official court docket since the initial complaint for declaratory and injunctive relief was filed on behalf of the Standing Rock Sioux Tribe by Earthjustice on July 27, 2016.⁴⁰ The court docket includes many of the procedural, policy, and engineering technical arguments used by the Standing Rock, Cheyenne River, Oglala, and Yankton Sioux Tribes to halt the Army Corps from permitting the construction and operation of the DAPL underneath Lake Oahe, one-half mile from the northern boundary of the Standing Rock Sioux Reservation. The docket also contains the procedural, policy, and technical information used by the Army Corps and Dakota Access to defend the permitting, construction, and operation of the pipeline.

As it is a voluminous court record, not all documents and records are included in this report. Documents such as motions filed with the court for extensions of deadlines and miscellaneous filings by the principal plaintiffs (Standing Rock Sioux Tribe, Oglala Sioux Tribe, and Yankton Sioux Tribe), the principal plaintiff intervenor (Cheyenne River Sioux Tribe), defendant (Army Corps), and defendant intervenor (Dakota Access Pipeline, LLC) or those documents giving notice of documents submitted and entered into the official court record are excluded, except where relevant for informational purposes. Some technical documentation that has been critical in the case to which the authors have been privy are not included herein and only discussed to the extent that is allowed under signed legal non-disclosures.

The administrative record (AR) that was filed with the court is the set of non-deliberative documents that the decision-maker (e.g., Army Corps) considered, directly or indirectly (e.g., through staff), in making the final decision. The information includes all the factual, planning, technical, engineering, and scientific material that the Army Corps staff considered directly or indirectly (e.g., staff and/or project Dakota Access), in making the final decision, whether those materials or data support the decision. For the Army Corps decision on DAPL that was challenged in court, the AR was reviewable under the Administrative Procedure Act (APA).⁴¹ The AR has played a large role in the SRST/Army Corps/Dakota Access case. The AR also includes all public comments submitted as part of the public comment period for the Draft EA, whether those comments support the project or not. The AR for the DAPL project does not necessarily include all documents related to the matter that are official government

⁴⁰ *Id.*

⁴¹ 60 Stat. 237, See also *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402 (1971),

records under the Federal Records Act.⁴² For example, official internal memoranda between agency personnel related to the project may be agency records but not necessarily part of the “AR” because they are considered deliberative.

Section 6 is the conclusions section.

Appendix A is the comprehensive *Timeline of Events* in table format for the entire DAPL project from its inception in 2014 to present.

Appendix B contains the Pipeline Safety Trust Emergency and Spill Response Explainer.

01.6 Who We Are

NDN Collective is an Indigenous-led and operated 501(c)(3) organization whose mission is dedicated to building the collective power of Indigenous Peoples, communities, and Nations by exercising our inherent right to self-determination, while fostering a world that is built on a foundation of justice and equity for all people and the planet. Headquartered in Rapid City, SD, our seven-member board and a professional staff of 40 Indigenous professionals focuses on organizing, activism, philanthropy, grantmaking, capacity-building, and narrative change to create sustainable solutions on Indigenous terms and to equip all Indigenous Peoples with the tools needed to become architects of their future.

Our team has successfully developed this report in collaboration and consultation with an array of skilled and respected industry Native and non-Native specialists who also possess intimate knowledge of the DAPL. Together, these specialists represent over 250 years of modern and direct professional oil, gas, and pipeline engineering, scientific, safety, environmental, legal, and policy experience with the purpose of speaking Native Truth and Wisdom about the faulty infrastructure while deconstructing the false sense of safety ET, Dakota Access, and the Army Corps have attempted to promulgate. Those professional experiences also span both international and domestic fossil fuel exploration, development, production, and transport.

⁴² 64 Stat. 578



+ Photo by Cadence Feeley

02. Understanding Treaty Rights and the Dakota Access Pipeline

02.1 The DAPL Occurs on Unceded Indigenous Lands

The DAPL pipeline currently lies 0.55 miles north of the Standing Rock Sioux Reservation and near Cannonball, ND (**Figure 1-1 and Figure 1-2**). Readers of this report should keep in mind that while the DAPL is an extensive 1,172-mile underground pipeline from western North Dakota near Stanley, ND to Patoka, IL, most of the DAPL was permitted and built under state law. A project of this magnitude often necessitates an extensive federal appraisal and permitting process. Not so here. Domestic intrastate and interstate oil pipelines, unlike interstate natural-gas pipelines, require no general approval from the federal government. In fact, the DAPL needs almost no federal permitting of any kind because 99 percent of its route traverses private land.^{43,44}

Despite state jurisdiction, the DAPL in North Dakota trespasses through unceded treaty lands granted under the Fort Laramie Treaties of 1851 and 1868 (**Figure 1-4 and Figure 2-1**), and despite most of the DAPL right-of-way occurring on private lands, numerous cultural and spiritual sites significant to the Standing Rock Nation and the Tribes of the Great Sioux Nation occur along its length in North Dakota.⁴⁵

02.2 Standing Rock Sioux Treaty Rights to the Missouri River and Adverse Impacts of the Army Corps' Operations

The Standing Rock (SRST), Cheyenne River (CRST), Yankton (YST), Oglala (OST), and Rosebud (RST) Sioux Tribes are part of the seven bands of the Great Sioux Nation, often referred to by Tribal citizens as the Oceti Sakowin Oyate ("Seven Council Fires"). Standing Rock is renowned as the Tribe of the great 19th century war chief and spiritual leader Tatanka-lyotanka, aka Sitting Bull. Sitting Bull was a chief acknowledged by all Sioux Tribes.⁴⁶

In the 20th century, the taken lands from the Army Corps' Lake Oahe dam project were the most productive lands remaining on the Standing Rock and Cheyenne River Reservations, supplying 90% of the timber, wild berries, and plants essential to the Tribe's diet and ceremonies, habitat for animals hunted for subsistence, and fertile lands for growing food.⁴⁷ The 1954 Cheyenne River Act took Cheyenne River Sioux land for the dam and recreational projects on the Missouri River.⁴⁸

43 *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Standing Rock I)*, 205 F.Supp. 3d 4, 2016 WL 4734356 (D.D.C. Sept. 9, 2016).

44 *Id.*, 239 F. Supp. 3d 77, (D.D.C. 2017)

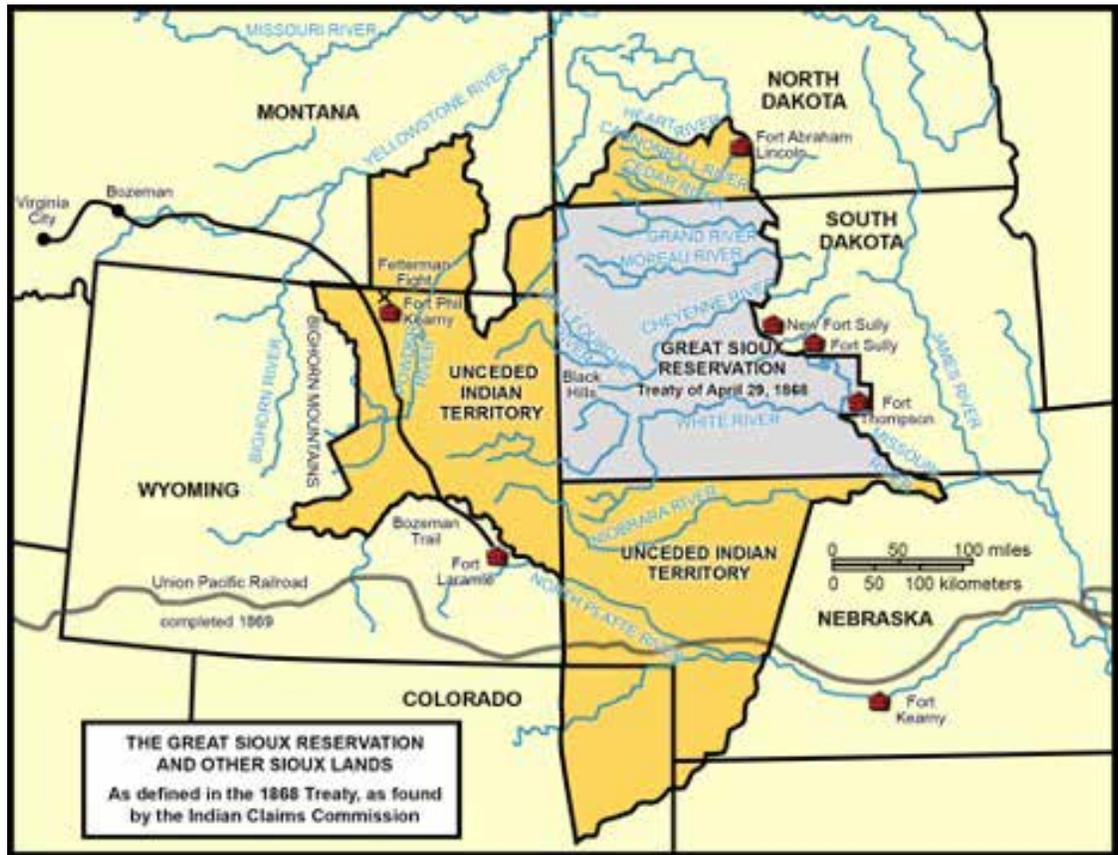
45 *Id.* Document No.29-1 Declaration of Tim Mentz (D.D.C. Sept. 2, 2021).

46 Tata ka lyota ka (Sitting Bull), Hunkpapa Lakota (ca. 1831-1890). See: <http://aktalakota.stjo.org/site/News2?page=NewsArticle&id=8778> (Accessed on April 12, 2021).

47 Senate Report No. 102-267 at 188 (192).

48 Cheyenne River Act of 1954, Pub. L. No. 776, 68 Stat. 1191; *South Dakota v. Bourland*, 508 U.S. 679, 683 (1993).

» Figure 2-1. Sioux Nation lands as adjudicated by the Indian Claims Commission.



The following account (*italicized*) has been excerpted directly from the SRST technical team's **SRST Remand Report**,⁴⁹ and is included here as it provides cogent and significant background for this report and informs the purpose and need for this report.

Tribal oral history tells that Sitting Bull camped along the Cannonball River around 1850 and held discussions with military officers at Fort Rice on the extent of the Sioux hunting grounds. The Treaty of Fort Laramie of 1851 formally recognized the boundaries of Sioux lands, a vast area of the northern plains bounded by the Big Horn mountains to the west, the Heart River to the northern plains, bounded by the Big Horn mountains to the west, the Heart River to the north, the Missouri River to the east and extending south to the Platte River.⁵⁰ The Montana Territory gold rush of 1864 saw trespassers crossing Sioux Country in violation of the 1851 treaty. The resulting Powder River War of 1865-1866 witnessed many Sioux victories, and the United States petitioned for a peace treaty with the mighty Sioux.

This led to the Fort Laramie Treaty of April 29, 1868.⁵¹ The Sioux negotiators ensured that the Sioux retained the sacred Black Hills, integral to the Sioux creation story, and the Missouri River, where the ancestors of the Standing Rock Sioux Tribe wintered in the river bottomlands and established communities that exist to this day. Article 2 of the 1868 treaty established the Great Sioux Reservation, which comprised all present-day South Dakota west

⁴⁹ Available at: <https://earthjustice.org/sites/default/files/files/srst-report-on-scope-dapl-eis.pdf>

⁵⁰ Article 5 of the 1851 Fort Laramie Treaty states "The territory of the Sioux or Dacotah Nation, commencing the mouth of the White Earth River, on the Missouri River; thence in a southwesterly direction to the forks of the Platte River; thence up the north fork of the Platte River to a point known as the Red Butte (sic), or where the road leaves the river; thence along the range of mountains known as the Black Hills; to the head of Heart River, and thence down Heart River to the place of beginning." *Id.*

⁵¹ 15 Stat. 635.

of the Missouri River (Mni Sose).⁵² The treaty stipulated that the Reservation extended to the Missouri River's east bank, placing the riverbed within the Great Sioux Reservation. In entering the 1868 Treaty, the Sioux negotiators knew the value of the Missouri River, to their homes and cultural practices, and they ensured that the Missouri River remained part of their Treaty homeland.

Under the 1868 Fort Laramie Treaty, this land "is set apart for the absolute and undisturbed use and occupation of the Indians herein named" – the Lakota and Dakota, or Sioux, Nation.⁵³ It further provided that "the United States now solemnly agrees that no persons... shall ever be permitted to pass over, settle upon, or reside in the territory described in this article."⁵⁴ Moreover, "No treaty for the cession of any portion or part of the reservation... shall be of any force or validity as against said Indians, unless executed and signed by at least three-fourths of all the adult male Indians."⁵⁵

The Great Sioux Reservation was only a portion of the vast land area defined as Sioux land in the prior 1851 Fort Laramie Treaty. The area identified as Sioux land in the 1851 Treaty, but which lay outside of the Great Sioux Reservation that was established in the 1868 Treaty, was addressed in Article XVI of the 1868 Treaty.

The United States hereby agrees and stipulates that the country north of the North Platte River and east of the summits of the Big Horn mountains shall be held and considered to be unceded Indian territory and stipulates and agrees that no white person or persons shall be permitted to settle upon or occupy any portion of the same; or without the consent of the Indians, first had and obtained, to pass through the same (See: **Figure 2-1**).

This is the very area through which the Dakota Access Pipeline passes, crossing the Missouri River less than one-half mile from the present-day Standing Rock Sioux Reservation.

Congress granted the tribe jurisdiction to sue for "misappropriation of any of the funds or lands of said tribe[.]"⁵⁶ When the dispute reached the Supreme Court in 1942, however, the Court held that because the 1875 and 1876 reservations were created by executive order, the Sioux Nation had no right to compensation when the United States took their land.⁵⁷ The Sioux persisted and won a partial victory in *U.S. v. Sioux Nation of Indians* in 1980. In that case, [Associate Supreme Court] Justice [Harry] Blackmun described the history of the U.S. government's relationship with the Sioux, quoting: "[a] more ripe and rank case of dishonorable dealings will never, in all probability, be found in

52 Article 2 of the 1868 defines the boundaries of the Great Sioux Reservation as follows: "commencing on the east bank of the Missouri River where the 46th parallel of north latitude crosses the same, thence along low-water mark down said east bank to a point opposite where the northern line of the State of Nebraska strikes the river, thence west across said river, and along the northern line of Nebraska to the 104th degree of longitude west from Greenwich, thence north on said meridian to a point where the 46th parallel of north latitude intercepts the same, thence due east along said parallel to the place of beginning; and in addition thereto, all existing reservations of the east bank of said river." *Id.*

53 *Id.*

54 *Id.*

55 15 Stat. 638.

56 *Sioux Nation of Indians*, 448 U.S. at 384.

57 *Sioux Tribe of Indians v. United States*, 316 U.S. 317, 329 (1942).

our history, which is not, taken as a whole, the disgrace it now pleases some persons to believe.”⁵⁸

As explained by the late Professor Vine Deloria, Jr., a Standing Rock Sioux Tribal member:

“It is clear that the United States never intended to keep any of its promises” made in the treaties with the Sioux.⁵⁹ After entering the 1868 Treaty, the United States negotiated with handpicked “chiefs” and obtained fraudulent signatures and chipped away the Sioux land base through a series of congressional enactments in the late eighteenth and early 20th century.⁶⁰

The Sioux Nation filed suit in 1923 for the return of the sacred Black Hills. In 1980, the United States Supreme Court awarded the Sioux Nation \$108 million for the unconstitutional taking of the Black Hills and other Treaty lands.⁶¹

The Court decided that Congress did not grant the Sioux an appropriate sum when it took its traditional territorial hunting lands, including the Black Hills, under its 1877 act.⁶² This affirmed that Congress never had given just compensation.

The Sioux have been fighting over the loss of their land for generations. In 1923, a lower court’s remedy for over \$18 million in damages for the federal takings.⁶³ While this was a “successful” legal challenge, it granted only monetary damages, not a right to return to their sacred Black Hills. As a result, the Sioux Nation has refused to accept the monetary award, which with interest is now worth over one billion dollars.⁶⁴

The Sioux Nation rejected the money damages upheld by the Supreme Court and maintains that land restoration remains part of any settlement of the Sioux Nation land claim. It remains an active claim, today – and the land throughout western South Dakota, and extending north to Heart River, south to the Platte River and west to the Big Horns, remains clouded by the unresolved land claim of the Great Sioux Nation.

A 1958 act took 56,000 acres of SRST land for the same purpose.⁶⁵ Both acts contained similar language about the fishing and hunting rights of the Cheyenne River and Standing Rock Sioux, reserving for the Tribes, “access to the shoreline of the reservoir, including permission to hunt and fish in and on the aforesaid shoreline and reservoir[.]”⁶⁶ The Standing Rock Sioux

58 *Sioux Nation of Indians*, 448 U.S. at 388 (quoting *United States v. Sioux Nation of Indians*, 518 F.2d 1298, 1302 (Ct. Cl. 1975)).

59 Vine Deloria, Jr., “Custer Died For Your Sins, An Indian Manifesto,” MacMillan Publishing, p. 55 (1969).

60 The Act of Feb. 2, 1877, purported to relocate the western boundary of Great Sioux Reservation from the 104th parallel of longitude east to the 100th parallel, which removed the sacred Black Hills from the Great Sioux

61 *United States v. Sioux Nation of Indians*, 448 U.S. 371 (1980).

62 *Id.* at 422–24.

63 *Id.* at 371–72. See also Shoemaker, *infra* note 35, at 77 (explaining that the Sioux tribe never took the money—with the total now over \$1.3 billion).

64 *For Great Sioux Nation, Black Hills Can’t Be Bought for \$1.3 Billion*, PBS (Aug. 24, 2011) <https://www.pbs.org/newshour/show/why-the-sioux-are-refusing-1-3-billion>.

65 *Compare* Pub. L. No. 85-915, §10, 72 Stat. 1762, 1764 (1958), *with* Pub. L. No. 776, §10, 68 Stat. 1191, 1193 (1954).

66 Pub. L. No. 85-915, §10, 72 Stat. 1762, 1764 (1958). See also Cohen’s Handbook of Federal Indian Law §18.02 (Neil Jessup Newton & Bethany R. Berger eds., 2017) (noting that “[s]tatutes and agreements ratified by Congress become, like treaties, the supreme law of the land, and preempt state laws to the contrary”).

Tribe received \$12.3 million, which was supplemented in the mid-1990s with \$90.6 million.⁶⁷ In 2000, Congress passed Cheyenne River Sioux Tribe Equitable Compensation Act, which provided \$290.7 million plus \$144 million in back interest to the tribe in recognition that “the federal government did not justify, or fairly compensate the tribe” for the Oahe Dam and Reservoir construction.⁶⁸ It is against this backdrop that the SRST has viewed the proposed construction of the DAPL.

As the Sioux legal case for the Black Hills and other Treaty lands wound through the court system in the twentieth century, the Army Corps of Engineers planned a series of large earthen dams on the Missouri River. The largest reservoir, Oahe, was to be placed right on the Standing Rock Indian Reservation. In 1958, the Corps convinced Congress to enact legislation for the taking of 56,000 acres of wooded Missouri River bottomlands from the Standing Rock Sioux Tribe. These were the Tribe’s most fertile and economically productive lands and wildlife habitat. The Corps forcibly relocated four Tribal communities during the harsh winter of 1959-1960, to new homesites on the more barren plains high above the river bottom.

*Professor Deloria described **the construction of Oahe and the other Missouri River dams as “the single most destructive act ever perpetrated on any Tribe by the United States.”**⁶⁹*

Historian Michael L. Lawson wrote the seminal account of the dams’ impact on Standing Rock and other affected Sioux Tribes. Lawson explained that “The Oahe Dam destroyed more Indian land than any other public works project in America.”⁷⁰

*The Lake Oahe takings have also reached the Supreme Court. In *South Dakota v. Bourland*, the Court held that the Cheyenne River and Standing Rock Sioux could no longer regulate non-Indian hunting and fishing on the lands taken for the project.⁷¹ The Supreme Court found that the Flood Control Act and the Cheyenne River Act “abrogated” the tribe’s right to “absolute and undisturbed use and occupation” of the land, and as a result, did not have the ability to regulate non-Indians on Indian land.⁷² Nevertheless, the Court explained, the Oahe Acts and the Flood Control did not abrogate Sioux treaty rights in the flooded territory.⁷³ The Oahe project’s impacts on the Standing Rock Reservation have, however, been socially, economically, politically, aesthetically, spiritually, and psychologically devastating to the Tribes.*

As described by Lawson:

“Damages... touched every aspect of Sioux life. Abruptly the tribes were transformed from a subsistence to a cash

67 *Impact of the Flood Control Act of 1944 on Indian Tribes Along the Missouri River Before the S. Comm. on Indian Affairs*, 110th Cong. 4 (2007).

68 Pub. L. 106-511, title I, Nov. 13, 2000, 114 Stat. 2365

69 Michael L. Lawson, *Dammed Indians: The Pick-Sloan Plan and the Missouri River Sioux, 1944-1980, introduction by Vine Deloria*, (1982)

70 *Id.* at 50.

71 *South Dakota v. Bourland*, 508 U.S. 679, 697 (1993). See also *Lower Brule Sioux Tribe v. South Dakota*, 711 F.2d 809, 813 (8th Cir. 1983) (explaining that the land taken was “of great value because the river bottomland was well suited for raising and grazing domestic animals and was rich in game, and the river was well stocked with fish”).

72 *Id.* at 697.

73 See *Id.* (explaining that certain rights were reserved in the trust lands, such as “the right to hunt and fish”); see also *Lower Brule*, 711 F.2d at 813, 824-26 (expressing that flood control projects do not suggest a congressional intent to abrogate Indian rights to hunt and fish); Tompkins, *supra* note 5, at 11 (“[N]either the Oahe Acts nor the Flood Control Act extinguished Sioux tribal hunting and fishing rights over the taken territory.”).

economy and were forced to find new ways to make a living. The uprooting of longstanding Tribal communities disrupted and disorganized the social, economic, political, and religious life of well-integrated Tribal groups and had a serious effect on the entire reservation population. It was an onerous imposition on tribal members to be forced to move their community halls, churches, and religious shrines. It was even harder for them to remove the graves of their ancestors. Yet... the largest cemeteries and most of the private burial grounds had to be excavated and moved elsewhere.

Psychological and aesthetic damages were more difficult to measure. Because of the close relationship with nature, the Sioux had a sacred attachment to their land. The areas along the river afforded them a comfortable and relatively scenic environment with resources enough to sustain their way of life. The loss of this land and livelihood had a strong emotional impact on them. Unlike others affected by public works projects, they were not able to duplicate their old way of life by moving to a similar environment. No Indian lands like the ones vacated existed after inundation."⁷⁴

As later described by Sen. Daniel K. Inouye during a congressional hearing decades later, **"I would say that this was not even robbery. It was murder."**⁷⁵

02.3 Army Corps Approval of the DAPL Continues as a Modern-Day Dispossession of Native People

In the 20th century, the U.S. continued to compound the legacy of dispossession by building Oahe dam on the Missouri, inundating the best lands on the Standing Rock Sioux Reservation.

*"[W]hen one strips away the convoluted statutes, the technical legal complexities, the elaborate collateral proceedings, and the layers upon layers of interrelated orders and opinions from this Court . . . what remains is the raw, shocking, humiliating truth at the bottom: After all of these years, our government still treats Native American Indians as if they were somehow less than deserving of the respect that should be afforded to everyone in a society where all people are supposed to be equal."*⁷⁶

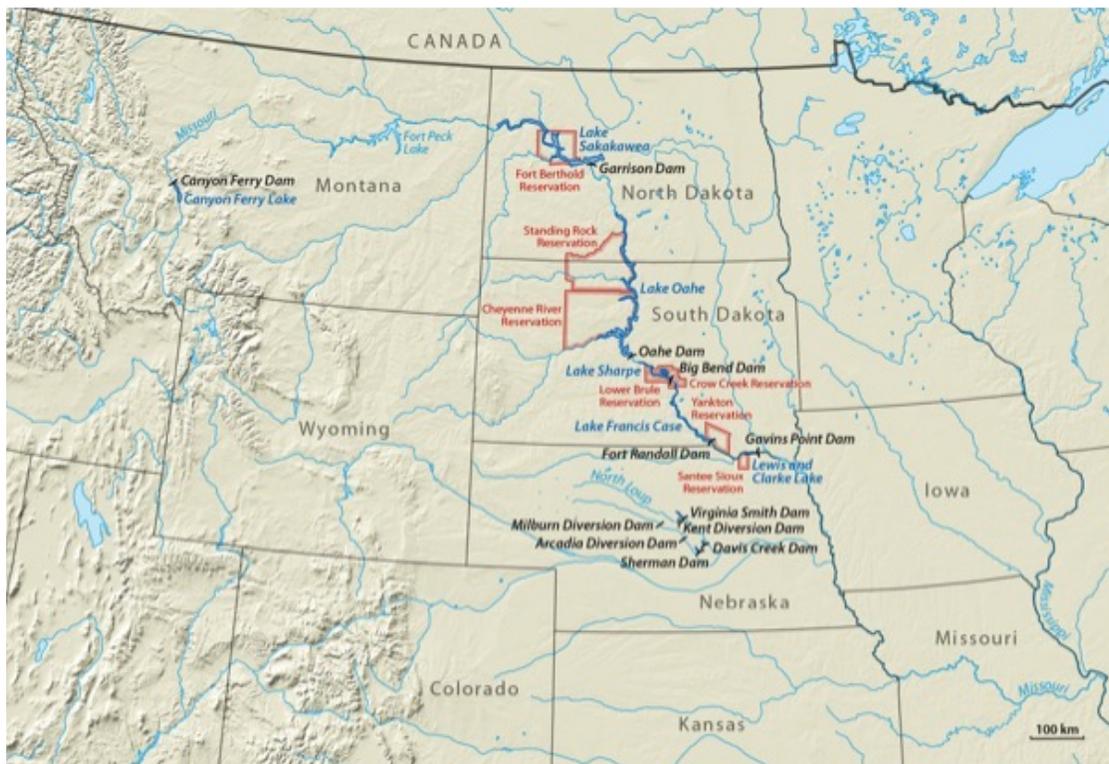
Dakota Access' proposal to traverse the Missouri River, barely a half mile upstream of the Standing Rock Sioux Reservation and crossing lands stolen from the Sioux by the U.S.

⁷⁴ *Id.* at 57-58.

⁷⁵ Senate Hearing, 100-249, p. 24 (1987).

⁷⁶ *Cobell v. Norton*, 229 F.R.D. 5, 7 (D.D.C. 2005), *vacated*, 455 F.3d 317 (D.C.Cir. 2006).

» **Figure 2-2.** Missouri River dams and reservoirs in the Pick-Sloan Program since the 1940s, and the Indian reservations affected by reservoir flooding.



Source: Map: NordNordWest, Licensed under [Creative Commons by-sa-3.0 de](https://creativecommons.org/licenses/by-sa/3.0/de/)

government, triggered an unprecedented Indigenous-led opposition movement that garnered global attention. The Oahe crossing site is rich in cultural significance and permitting the easement for Dakota Access' massive crude oil pipeline along and beneath the Missouri River poses a grave threat to Tribal identity as well as to Tribal health, fishing, hunting, and drinking water. The proposal to build the pipeline in that location not only triggered an unprecedented Indigenous-led opposition movement that garnered international attention but shined a light on the continued legacy of the Army Corps' actions that have continued to cause Indian disenfranchisement and dispossession into the 21st century.

Today, the Corps of Engineers operates the Oahe Dam and manages the Corps' project lands around Lake Oahe, and routinely violates the rights of the Standing Rock Sioux Tribe. The Corps releases water from Oahe Dam for hydropower generation, downstream navigation, and municipal water intakes in urban areas in the lower Missouri Basin. These water releases result in significant fluctuations in the elevation of Lake Oahe and degrade Tribal water sources.

During periods of drought, the Corps' water releases at Oahe Dam for downstream navigation and water supply diminish water supplies needed for Tribal drinking water and irrigation systems. This is the case even though the federal law Winters Doctrine confers priority to the fulfillment of Tribal water rights because Indian water rights are derived from Treaties, which predate the state law water rights of non-Indians.

During the drought of the early 2000s, the Oahe Reservoir declined by approximately 15 feet of elevation, due to ongoing water releases for downstream navigation. On November 23, 2003, the silt deposits caused by low flows rendered the Standing Rock community water system inoperative. For a period of 12 days, three Tribal communities on the Standing Rock Reservation, with a cumulative population of 5,777, were forced to rely on bottled water. Kidney dialysis patients at the Fort Yates Hospital were forced to travel to Bismarck, ND, 65 miles away. The Corps of Engineers' water releases for lower Missouri River navigation

seriously degraded water supplies on the Standing Rock Sioux Reservation and caused a public health crisis.

The Army Corps' water management at Oahe Dam adversely impacts Tribal water supplies and violates the Tribe's Treaty rights to water. As explained by then-Tribal Chairman Charles Murphy to the U.S. Senate Committee on Indian Affairs, "It's very sad right now that we don't know if we are going to have water next week or not... they're letting too much water downstream."⁷⁷

In addition, the Army Corps manages Lake Oahe project lands, including land immediately adjacent to the Standing Rock Sioux Reservation. The Corps' management authority includes permitting of oil pipeline crossings of the Missouri River. In exercising this authority, the Corps has approved the placement of a hazardous Bakken crude oil pipeline just upstream of the Standing Rock Sioux Reservation exterior boundary, imposing significant spill risks onto the Tribe without transparency or meaningful consultation."

The SRST and their relative Sioux Tribes downstream inhabited and depended on the Missouri River Basin for their traditional cultural and resource sustenance for centuries before the colonizers occupied their lands. Throughout the 20th century, the U.S. government, and especially the Army Corps, has never properly evaluated the risk or potential impacts from some of the largest of the country's resource intensive or extractive projects Understanding Treaty Rights and the Dakota Access Pipeline. Instead, the DAPL represents the continued disregard for Indigenous people, unjustly raising the risk level by intensifying the cumulative burdens that Sioux Tribes upstream and downstream have had to bear throughout U.S. history.

The Lakota had prophesied this: a great and evil black snake would someday descend and reap destruction, rendering their homeland uninhabitable to hunt and fish and their waters unsuitable for religious ceremony.^{78,79} The black snake disrupts the Lakota's sacred connection to their land.⁸⁰ That prophesy may still yet become a reality if the Army Corps concludes that it can issue its easement for the DAPL at the Lake Oahe crossing.⁸¹

The events and court cases described in Section 2.2 above also demonstrate the long history of the Sioux Nation trying to remedy the loss of its historic lands. Nonetheless, these losses have had far more devastating effects on the Tribes' economies, culture, and ability to achieve a level of inherent tribal sovereignty and self-determination recognized through treaty rights, as the effects of past U.S. policy are still felt profoundly.⁸² The DAPL project also profoundly demonstrates in the 21st century that federally sanctioned infrastructure projects have continued that trend of giving corporations all the benefits at the expense of others. The Tribes, on the other hand, "have never denied that shutting down the pipeline would have impacts; however, they have emphasized that the profits of others should not come at the expense of the Tribes, especially when the law has not been followed."⁸³ The DAPL pipeline is just another example of the historic losses the Sioux Tribes have had to suffer unjustly and unnecessarily.

⁷⁷ Water Problems on the Standing Rock Indian Reservation: Hearing Before the Senate Comm. on Indian Affairs, 108th Cong. 1-4 (2004).

⁷⁸ Lakota Indians, Indians.org, The term "Lakota" refers to the cluster of tribes—including the Standing Rock Sioux, Cheyenne River Sioux, Yankton Sioux, Oglala Sioux, and Rosebud Sioux Tribes—located in North and South Dakota. Available at: <http://www.indians.org/articles/lakota-indians.html>. (Accessed on: May 8, 2021)

⁷⁹ *Standing Rock Sioux Tribe v. Army Corps of Engineers*, 239 F.Supp.3d at 82.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² Senate Report No. 102-267 at 188 (192).

⁸³ *Standing Rock Sioux Tribe v. US Army Corps of Engineers*, No. 1:16-cv-01534-JEB Document 97, Response to DAPL Sur-reply in Opposition to Motion Permanent Injunction (D.D.C. Apr. 23, 2021).

03. Trump-era NEPA and the Dakota Access Pipeline Project

This section is divided into subsections, starting with a broad brush look at NEPA in Section 3.1. Section 3.2 looks at the sweeping changes the previous Trump administration made and how they may impact how the Army Corps handles the DAPL EIS going forward. As of the date of this report, there is some anticipation that the Army Corps intends to release the Draft EIS the week of July 12 or the week of July 19. It is uncertain how the agency will conduct public comment on the Draft EIS given the Trump CEQ changes. Section 3.3 looks at the Biden Executive Orders that have been issued relative to how the government is proceeding with environmental issues including climate change, and how those changes could influence the DAPL EIS as it is drafted and the likely litigation that will ensue. Section 3.4 is a look at the principal federal statutes that apply to the DAPL project and their nexus with NEPA.

03.1 Overview of NEPA

03.1.1 NEPA – The Country’s Bedrock Environmental Law

The National Environmental Policy Act (NEPA) of 1969 established a basic framework for encouraging environmental protection in the United States and was signed by President Richard Nixon in 1970. It established a Council on Environmental Quality (CEQ), which enforces NEPA in federal agencies and advises the president. Often called this country’s “bedrock environmental law,” NEPA allows the public to participate in government decision-making. It also helps ensure transparency by requiring that federal agencies “look before they leap” and analyze potential environmental harms before making decisions. It is important to know that NEPA is a disclosure document that guides agency decisions and is not itself a permit. The law has served as the model for conducting environmental impact assessments and is the model on which more than 100 other countries and dozens of U.S. states and localities base their laws for environmental impact statements and environmental impact analyses (EIA).

NEPA is required when a federal action is taken that may have impacts on the human and natural environment. Federal actions are those that require Federal funding, permits, policy decisions, facilities, equipment, or employees.

There are three primary objectives of NEPA:

1. Ensure that agencies consider every significant aspect of a proposed project’s environmental and social impact.
2. Inform and advise the public of potential impacts and alternatives.
3. Provide an opportunity for the public to participate in the process.

Two major opportunities for the public to become involved in NEPA are:⁸⁴

1. At the beginning of the NEPA process during the public scoping period.
2. After the Draft NEPA document has been prepared.

⁸⁴ The CEQ under the previous Trump Administration proposed the most historically substantial revisions to NEPA to overhaul the 50-year-old law to favor and expedite approvals of large-scale infrastructure projects that often take years of careful review. Regulatory changes in the context of the DAPL EIS are discussed in Section 3.2 of this document.

While it is no secret that NEPA project reviews and the analysis required can be onerous, often taking years, project proponents often cite NEPA as a thorn in their side when working on federal land. These unsupported assertions were, more recently, based on a report “*Two Years Not Ten Years: Redesigning Infrastructure Approvals*,” prepared by Philip Howard for the organization Common Good (hereinafter, the “*Howard Report*”).^{85,86} However, at the behest of U.S. House’s Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, the Congressional Research Service (CRS)⁸⁷ issued a June 2017 memorandum that included an extensive analysis and critique of the Howard Report. CRS rejected the Howard Report’s assertions as being based on weak, unsubstantiated, and selective data, using broad undefined terminology to characterize NEPA projects and process, resulting in an overall faulty study on which energy and infrastructure project proponents and their respective trade groups continue to try to pin their perceived stunted and sluggish American economic prosperity on NEPA.⁸⁸

According to the Government Accountability Office (GAO), “Government-wide data on the number and type of most NEPA analyses are not readily available, as data collection efforts vary by agency. Information on the costs and benefits of completing NEPA analyses and federal agencies do not routinely track the cost of completing NEPA analyses, and there is no government-wide mechanism to do so, according to officials from the CEQ, EPA, and other agencies.”⁸⁹ The GAO further concluded that, “according to those agency officials, information on the benefits of completing NEPA analyses is largely qualitative and that assessing the benefits of federal environmental requirements, including those associated with NEPA, is difficult because the monetization of environmental benefits often requires making subjective decisions on key assumptions.” Those same agency officials told GAO that some of the qualitative benefits of NEPA include its role as a tool for encouraging transparency and public participation in discovering and addressing the potential effects of a proposal in the early design stages to avoid problems that could end up taking more time and being more costly in the long run.

Although the number of NEPA lawsuits is relatively small when compared with the total number of NEPA analyses, one lawsuit can affect numerous federal decisions or actions in several states, having a far-reaching impact.⁹⁰ The federal government prevails in most NEPA litigation, according to the CEQ and the National Association of Environmental Professionals (NAEP) data and other legal studies.⁹¹ The CEQ annually publishes survey results on NEPA litigation that identify the number of cases involving a NEPA-based cause of action; federal agencies that were identified as a lead defendant; and general information on plaintiffs (i.e.,

85 Philip Howard, *Two Years Not Ten Years: Redesigning Infrastructure Approvals*, Good Sense (2017). Available at: <https://static1.squarespace.com/static/5db4d0eacb29b173254203d2/t/5fd39d3ac4a2b267e284960c/1607703867904/2YearsNot10Years.pdf>. (Accessed on June 9, 2021).

86 Common Good is a New York-based 501(c)(3) organization that claims to be, “a nonpartisan reform coalition which believes individual responsibility, not mindless bureaucracy, must be the organizing principle of government. We present proposals to radically simplify government and restore the ability of officials and citizens alike to use common sense in daily decisions. and provide a new governing vision: replace red tape with individual accountability.” Mr. Howard, the author of the report, founded Common Good in 2002 and is Chairman of the Board. Mr. Howard has deep conservative and libertarian views. In April 2017, Howard joined President Donald Trump’s Strategic and Policy Forum, a forum of CEOs to advise on job creation and the economy. President Trump disbanded the forum in August 2017 after several members resigned.

87 Congressional Research Service (CRS), a federal legislative branch agency located within the Library of Congress, serves as shared professional staff exclusively to congressional committees and Members of Congress. CRS approaches complex topics from a variety of perspectives and examines all sides of an issue.

88 Congressional Research Service. Questions regarding the report *Two Years Not Ten Years: Redesigning Infrastructure Approvals*. Memorandum to House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit. 7-5700 (June 7, 2017). Available at: <https://fas.org/spp/crs/misc/twonot.pdf>. (Accessed on June 9, 2021).

89 Government Accountability Office, National Environmental Policy Act: Little Information Exists on NEPA Analyses. GAO-14-369 (April 2014). Available at: <https://www.gao.gov/assets/gao-14-369.pdf>. (Accessed on June 9, 2021).

90 *Id.* at 20.

91 *Id.*

grouped into categories, such as “public interest groups” and “business groups”); reasons for litigation; and outcomes of the cases decided during the year.⁹²

In general, according to the CEQ data, NEPA case outcomes are about evenly split between those involving challenges to EISs and those involving other challenges to the adequacy of NEPA analyses (e.g., EAs and CEs).⁹³ The federal government successfully defended its decisions in more than 50 percent of the cases from 2008 through 2011.⁹⁴ For example, in 2011, 99 of the 146 total NEPA case dispositions—68 percent—reported by the CEQ resulted in a judgment favorable to the federal agency being sued or dismissal of the case without settlement.⁹⁵ In 2011, that rate increased to 80 percent if the 18 settlements reported by the CEQ were considered successes. However, the CEQ did not present enough case-specific details to determine whether the settlements should be considered as favorable dispositions. The plaintiffs, in most cases, were public interest groups.⁹⁶

03.1.2 EA vs. EIS

03.1.2.1 Environmental Assessment

An EA is done to determine whether an action is a “major federal action significantly affecting the quality of the human environment” (**Figure 3-1**). The CEQ regulations do not say much about the content of an EA, but they do contain a substantial definition of what it means to have a “significant” impact. This can be used to structure the EA analysis.

The EA is supposed to be “brief but thorough.” It is not supposed to be “encyclopedic,” nor is it supposed to be a “mini-EIS” (environmental impact statement), though many, like the DAPL EA, are. It can be, and often is, the context in which other authorities, such as Section 106 of the NHPA, MLA, CWA, and Endangered Species Act (ESA), are addressed.

The use of an EA rather than an EIS means that an agency is not necessarily required to assess the cumulative impacts of the proposal along with all other existing and reasonably foreseeable future development nearby. In a practical sense, an EA functions as piecemeal planning due to their limited scope, while an EIS functions more as a holistic, landscape-level planning effort.

Agencies have discretion whether to conduct formal public scoping at the beginning of the NEPA process where the agency believes an EA suffices. Project sponsors must make an EA available for public inspection for a 30-day period. Circulating an EA and holding a public hearing or meeting is optional.^{97,98} A Notice of Availability (NOA), briefly describing the action and its impacts, must be provided to affected units of Federal, Tribal, State, and local government.⁹⁹ Agencies should typically provide a website link to the electronic version and give notice of the location where interested persons can view a hard copy. They should also identify a contact person who can provide a copy of the document upon request.

92 *Id.* CEQ did not define the terms “public interest group” or “business group” in its published survey results. According to CEQ officials, CEQ used the terms “public interest group” to include citizen groups and environmental nongovernmental organizations and the term “business group” to include business, industry, and development focused groups and organizations.

93 *Id.*

94 *Id.*

95 *Id.*

96 *Id.*

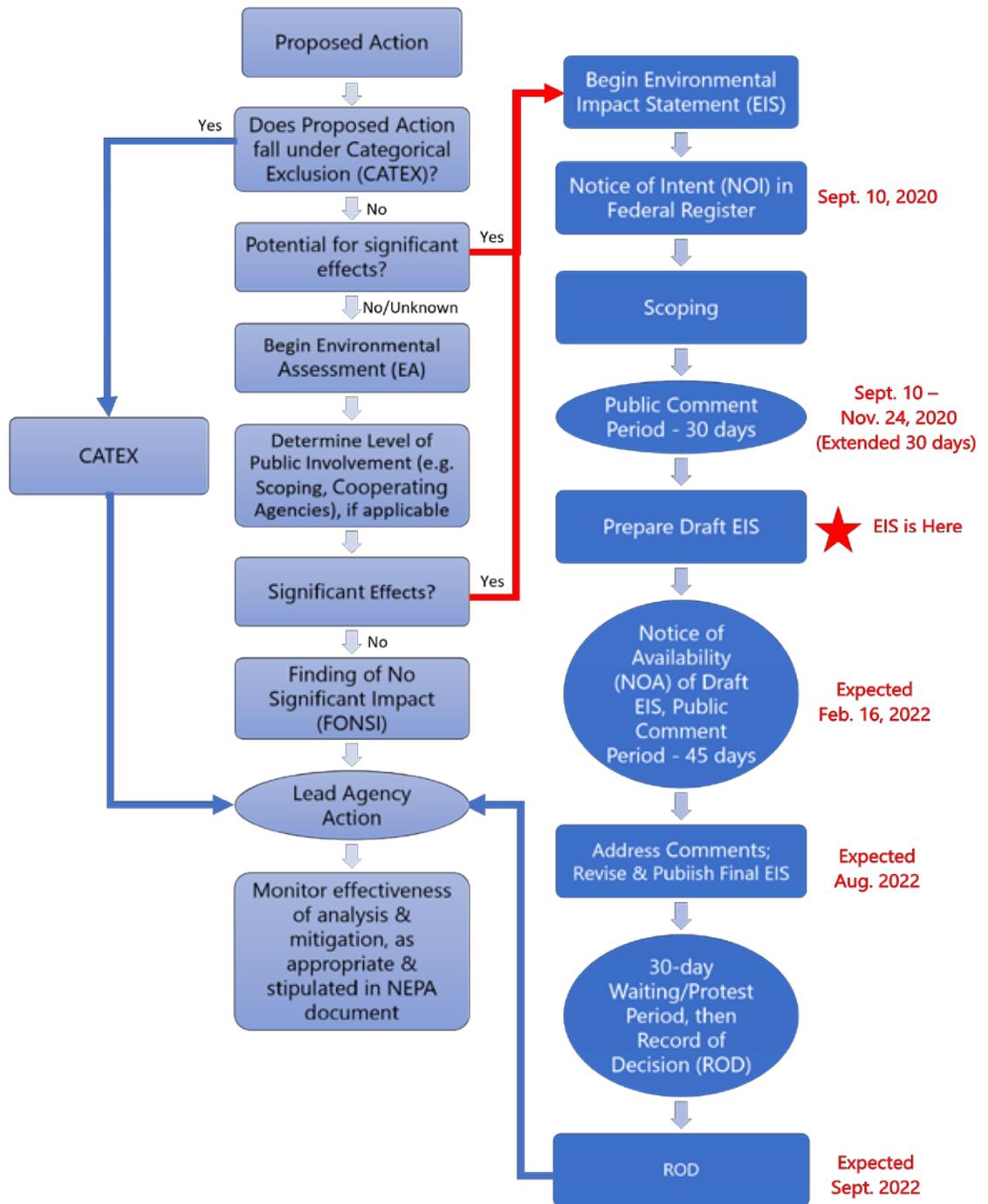
97 A public hearing is a formal meeting that is recorded and results in a transcript. A court reporter or independent third-party typically prepares the transcript. A public meeting does not require having a court reporter in attendance or a transcript, and can be in the form of townhall meetings, open houses, or charrettes.

98 23 CFR 771.119(d)-(f)

99 23 CFR 771.119(d)

The EA leads either to the decision to do an EIS or to a Finding of No Significant Impact (FONSI). The FONSI is published for public review and comment. Some courts have found that it is okay for a FONSI to include an agency's commitment to mitigation measures that

» Figure 3-1. Overview of the NEPA process.

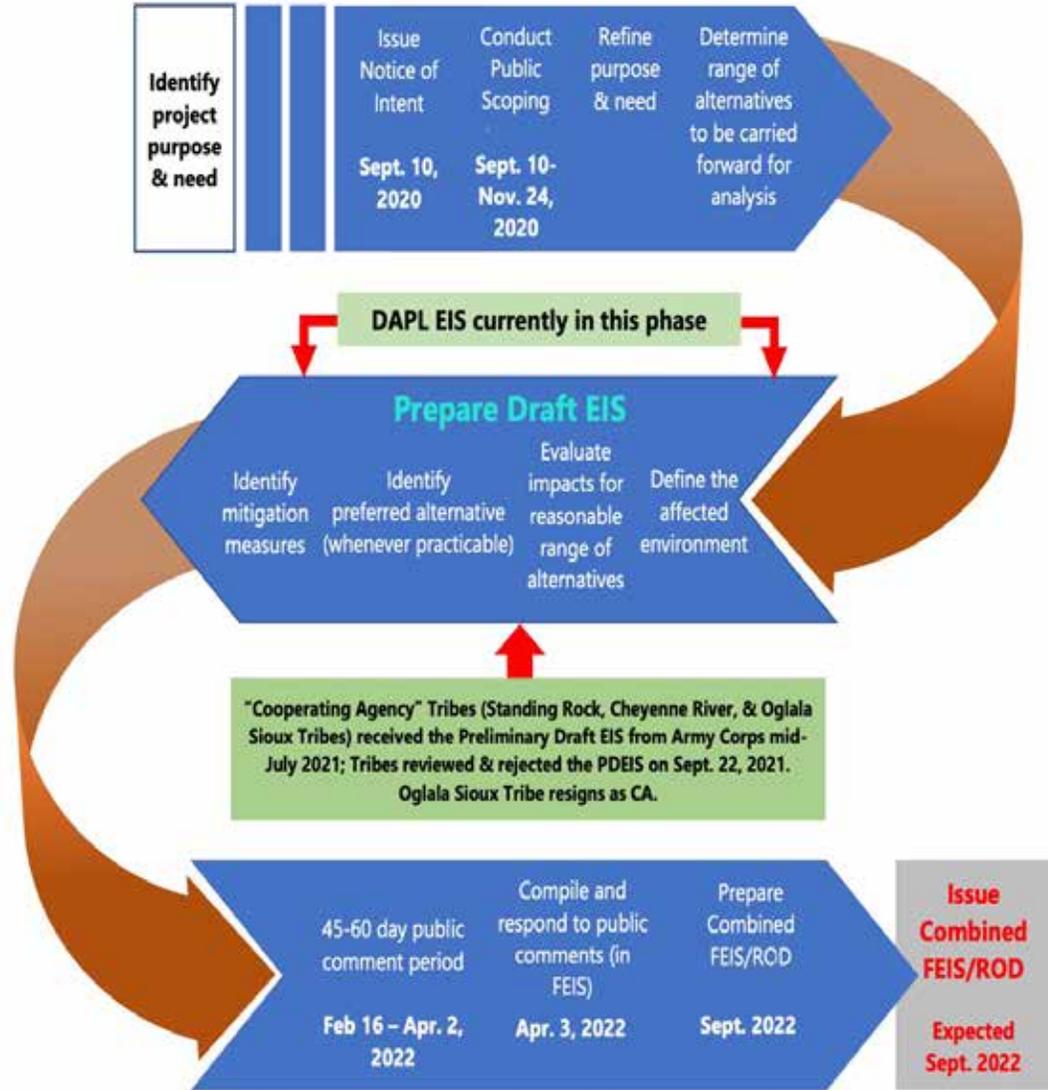


will, if implemented, bring the impacts of the project down below a significant level. Such FONSI, as is the case with the DAPL EA, are referred to as "mitigated FONSI." If the agency responsible for preparing and overseeing the EA cannot issue a FONSI, then it has essentially determined that **significant environmental impacts appear likely** and an EIS needs to be prepared.

03.1.2.2 Environmental Impact Statement

An EIS is a much more comprehensive document. An EIS requires everything an EA would require while also requiring a much more comprehensive discussion of the reasonable alternatives, and a “hard look” at the cumulative impacts of the proposal along with all existing and reasonably foreseeable future development within the project area Trump-era

» Figure 3-2. The DAPL EIS Process



NEPA and the Dakota Access Pipeline Project).

The U.S. Environmental Protection Agency (EPA) maintains the [Environmental Impact Statement Database](#), which includes records of all statements filed since 1987, and PDF copies of all statements filed since 2012. The database is free and fully searchable. There are notes about what stage the statement is in the review process (i.e., draft, final), so it is clear where a proposed project is in the process, or what type of statement is available. Each EIS in the database has a details page, which opens with one click. The details page outlines basic information: title of the statement, which generally conveys the Proposed Action; the EIS Number, which includes the year the statement was submitted (example: 20180271);

several notes about the document type, which details where the statement is in the review process; and contact details for the submitting federal agency. There are links to all the PDF documents (including attachments) that have been submitted for the Proposed Action.

The content of a federal EIS is regulated by the CEQ. A typical federal EIS includes the following sections and/or chapters:

- + **Section 1** – Introduces the **Purpose and Need** for the project and the agency's action, gives a **Project Overview**, defines the **Geographic Scope**, and provides a **General Overview** of the **NEPA Process** as it pertains to the proposed project. The section must also clearly identify the **Key Issues** and **Resources Affected** and the project's **Relationship to Other Relevant Statutes and Authorities, Documents, and Reports**.
- + **Section 2** – Describes the **Proposed Action** and presents a **Range of Alternatives** to the Proposed Action – this is considered the “heart” of the EIS. There is always a **No Action Alternative** presented, which is the baseline condition, or backdrop, for evaluating project impacts in comparison to the Proposed Action and other Alternatives. Understanding how the environment would respond if no action were taken helps to better evaluate the Proposed Action and Alternatives. The section also describes the agency's process for developing the Proposed Action and Alternatives.
- + **Section 3** – Describes the **Affected Environment**, which are the relevant natural, physical, and human resources. These resources are the baseline for understanding the current environmental resource situation in relation to the Proposed Action, other Alternatives, and the No Action Alternative.
- + **Section 4** – Analyzes the **Environmental Consequences**, which include the positive and negative environmental and social impacts of the Proposed Action, No Action, and the Range of Alternatives. The analysis typically includes:
 - Impacts to threatened or endangered species.
 - Air and water quality impacts.
 - Impacts to historical and cultural sites, particularly sites of significance for Indigenous peoples.
 - Social and economic impacts to Tribes and local communities, including housing stock, businesses, property values, and considerations of aesthetics and noise expected.
 - Cost and schedule analysis for all the actions and alternatives presented.
- + **Section 5** – Discusses **Cumulative Impacts**, which are the short term and long term combined and incremental effects the project may have on climate, humans, and other natural and physical resources within a global context and over a clearly defined and immediate geographic area and/or region.
- + **Section 6** – Discusses the proposed **Mitigation Measures** that would be implemented for the Proposed Action and each of the Alternatives under consideration.
- + **Section 7** – Describes the agency's **Preferred Alternative**. The Preferred Alternative may be the Proposed Action or one of the other Alternatives along with the proposed

Mitigation Measures. The Preferred Alternative may in some instances blend certain desirable elements of the various other Alternatives.

- + **Section 8** – Details how the **Preferred Alternative** complies with **Environmental Laws, Regulations, and Executive Orders**.
- + **Section 9** – Details the **Coordination and Public Involvement Process**, including **Federal Register Notices, Public Scoping Meetings, Communication and Media**, details of the agency's **Government-to-Government Consultation with Tribes**, and coordination with the **Cooperating Agencies**.
- + **Section 10** – Gives the **List of Preparers** involved in the EIS, including the education, and experience of Army Corps; other federal, state, and local agency; and third-party contractor personnel. This seemingly innocuous section is critically important given the extremely technical nature of the project. The skills, experience, and knowledge needed to synthesize and interpret complex data and other information should not be underestimated, especially where a carefully detailed technical analysis of the DAPL is so vital to protecting the sovereignty and long-term viability of the Oceti Sakowin.
- + **Section 11** – Lists all the **References** used to document and support the impacts discussed and conclusions reached in the EIS.
- 3. **Section 12** – Includes the **Appendices**, which are typically any supporting reports, detailed technical analyses (e.g., geotechnical reports), and/or other relevant documentation the agency, NEPA third-party contractor, and/or the project proponent (e.g., ET/Dakota Access) has used to support the impact analyses in the EIS.
- 4. **Section 13** – Includes a comprehensive **Index** of the key words, concepts, and topics discussed in the EIS.

The EIS may include additional topics not required for every project, including socio-economic and environmental justice studies, environmental mitigation plans, and plans for complying with any additional required federal, state, or local permits.

03.2 Understanding How Trump's CEQ Changes to NEPA May Affect the DAPL EIS

On July 16, 2020, the Trump administration's CEQ issued a Final Rule in the Federal Register entitled, *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act*.¹⁰⁰ The new regulations took effect on September 14, 2020 and marked the first comprehensive update to NEPA regulations in over 40 years. However, in March 2021, the Biden administration identified "numerous concerns" with a Trump-era environmental review regulation and has asked the U.S. District Court for the Western District

¹⁰⁰ 85 FR 43304 (July 16, 2020).

of Virginia to remand the rule rather than carry on with litigation.¹⁰¹ On October 6, 2021, the Biden administration's CEQ announced that it would make specific changes to reverse the regulations implemented by the previous administration, including cumulative impacts as it pertains to climate change.¹⁰² Under the Biden administration's CEQ proposed changes, agencies will have to consider the direct, indirect, and cumulative impacts of a decision — including assessing the consequences of releasing additional pollution in neighborhoods already burdened by dirty air.¹⁰³

In general, however, the revised Trump regulations remain in effect. The Trump regulations implemented sweeping changes to the environmental review process for federal projects that require federal permits and approvals, including rules where agencies can now adopt what's called "the functional equivalence exemption." This allows federal agencies the discretion to decide whether to do NEPA for a proposed project, or not. The 2020 regulations have also **eliminated the conflict-of-interest provisions in the original regulations. Under the Trump NEPA regulations, the private sector, including companies like Dakota Access, can now write their own EIS for infrastructure and energy projects they propose.** While NEPA has always allowed independent third-party contractors to prepare NEPA documents (paid for by the project proponent so as not burden the taxpayer), this rule would allow the company to do that without the assistance and expertise of a contractor. There are few project proponents, however, that have the in-house NEPA expertise to prepare an EA or an EIS. And the current NEPA regulations still require that the federal agency in charge take legal responsibility for the content, analysis, and conclusions in the NEPA document.

Most significantly, the Trump regulations eliminated the need to study a project's cumulative or indirect environmental effects; excludes certain projects from NEPA review; and shortens the time frame and page limits for NEPA documents. In January 2020, in response to criticism and thousands of comments to the changes initially proposed for revisions to eliminate consideration of climate change impacts, the CEQ also added new language requiring agencies to consider reasonably foreseeable "environmental trends" as part of the analysis of a project's baseline. Below is a brief analysis of the 2020 NEPA changes and the potential effect it could have on the Army Corps' EIS process. As noted above, these regulations are currently under review. The Trump-era regulations will remain in effect until the CEQ issues a Final Rule, which is currently anticipated sometime in mid- to late 2022. A ruling issued by any of the federal courts where numerous lawsuits have challenged the Trump-era regulations may also determine the course of NEPA. The sections below pertain to the current regulations in effect unless otherwise noted.

03.2.1 General Language and Definition Changes

the CEQ has included various definition changes that reflect a general relaxing of the regulations. For example, the CEQ removed the definition of "significantly," which required considerations of both "context" and "intensity" of potential environmental effects. This elimination diminishes the depth of environmental analysis required under NEPA. The new regulations also include subtle language modifications from "shall" to "should" or "may," and "possible" to "practicable," resulting in an overall weakening of NEPA requirements.

101 E.M. Gilmer, Biden officials rethinking trump environmental review rule. Bloomberg Law (March 17, 2021). Available at: <https://news.bloomberglaw.com/environment-and-energy/biden-officials-rethinking-trump-environmental-review-rule> (Accessed on: May 13, 2021).

102 L. Friedman. Biden administration to restore climate criteria to landmark environmental law. NY Times (Oct. 6, 2021). Available at: <https://www.nytimes.com/2021/10/06/climate/biden-nepa-environmental-law.html>. (Accessed on: Oct. 6, 2021).

103 86 FR 55757 Available at: <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions> (Accessed on: Oct. 7, 2021).

Additionally, the CEQ has placed a greater emphasis on economic considerations in the NEPA review process. For example, the revised “[p]urpose and policy” section requires consideration of economic requirements of present and future generations (40 C.F.R. §1500.1).

The environmental consequences section of an EIS must now include “economic and technical considerations, including the economic benefits of the proposed action.” (§1502.16) While economic effects were always a factor in the NEPA review process, they are now a stricter and more prevalent requirement. For example, public comments must now include an explanation of why the issues raised therein are important to economic and employment impacts (§1503.3).

Economic impacts are also a required consideration for agencies when deciding whether to refer environmental objections on a matter to the CEQ (Section 1504.2(g)). Additionally, economic feasibility is mandatory for an alternative to be considered “reasonable,” where it was previously just one factor agencies could consider when comparing alternatives (§§1505.2(a)(2), 1508.1(z)).

03.2.2 Narrowed Scope of Projects Requiring NEPA Review

The final rule narrows the definition of “major Federal actions” requiring preparation of an Environmental Impact Statement (EIS). New §1508.1(q), which incorporates the language from the proposed rule with minor revisions, amends the definition of “major Federal action” to exclude non-Federal projects with “minimal Federal funding or minimal Federal involvement where the agency does not exercise sufficient control and responsibility over the outcome of the project.” For example, the preamble to the final rule states that a project will not require NEPA review if it includes “a very small percentage of Federal funding” but “is otherwise funded through private or local funds.” However, the CEQ declined to adopt a precise threshold percentage or dollar figure to define “minimal Federal funding,” relying instead on individual agencies to identify exempt actions in their agency-specific NEPA regulations.

The Army Corps could effectively utilize this part of the new regulations to dodge the NEPA EIS; however, given the D.C. District Court Judge Boasberg’s Memorandum Opinion on March 25, 2020 remanding the Army Corps to prepare an EIS,¹⁰⁴ the D.C. Circuit Court of Appeals ruling on January 26, 2021, the Army Corps’ June 11, 2021 status report stating to the court that the EIS would be completed in March 2022,¹⁰⁵ Judge’s Boasberg’s order for case dismissal,¹⁰⁶ and that the Tribes have been invited (February 15, 2021) and have been engaged as cooperating agencies, it would be unprecedented if the Army Corps reversed course on the EIS. Such an action would invite the Tribes to make a motion to Judge Boasberg for an emergency injunction and the Army Corps is aware they would not prevail on this point.

One issue that remains unknown is how the Army Corps intends to narrow the scope of the EIS. The EIS is not going to analyze the entire pipeline. Relying on the DOI letter of March 29, 2016,¹⁰⁷ the CRST on September 8, 2016, asked the D.C. District Court to consider the parts

¹⁰⁴ *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*, No. 1:16-cv-01534-JEB, Memorandum Opinion and Order, Documents 495 and 496. (D.D.C. March 25, 2020).

¹⁰⁵ *Id.* Document 610 (June 11, 2021).

¹⁰⁶ *Id.* (June 22, 2021).

¹⁰⁷ *Id.* (June 22, 2021).

of the pipeline as a “connected action” under NEPA.^{108,109} Judge Boasberg ruled against the CRST stating that the DAPL had a limited federal nexus already and that Dakota Access could likely choose to select and realign the DAPL route without federal jurisdiction.

03.2.3 Elimination of Direct and Indirect Effects and Cumulative Impacts Analysis

For four decades, agencies were required to study a project’s environmental “effects,” including foreseeable direct, indirect, and cumulative effects, and to discuss cumulative impacts resulting from “the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” The new regulations eliminated the distinction between “direct” and “indirect” effects and replaced these classifications with a general definition of “effects or impacts” as “changes to the human environment ...that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives ...”(40 C.F.R. §1508.1(g)). “Reasonably foreseeable” is defined as “sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision”(§1508.1(aa)). Therefore, there must be more than “[a] ‘but for’ causal relationship ...to make an agency responsible for a particular effect...” and trigger environmental review under NEPA (§1508.1 (g)(2)).

“Cumulative impacts” have, for now, also been eliminated from NEPA regulations, which means that analyses of project impacts in the context of other actions are no longer required. These classification changes indicate that federal agencies would not be compelled to consider global impacts of projects, such as potential effects on climate change. This sentiment is further evidenced by the requirement that agencies should consider only “the affected area (national, regional, or local) and its resources,” and, “in the case of site-specific action, significance would usually depend *only* upon the effects in the *local* area” and a change in the definition of “Human environment” to replace “people” with “Americans”(§§1501.3(b) (1), 1508.1(m), italics added).

Eliminating cumulative impacts was widely seen by the Trump administration as a way to avoid and curtail climate change analysis. Climate change is quintessentially a cumulative impact because it is attributed to greenhouse gas (GHG) emissions from a multitude of global sources. However, responding to criticism, the CEQ emphasized that the new rule “does not preclude” consideration of a proposed action on “any particular aspect of the human environment,” and that analysis of a project’s impacts on climate change “will depend on the specific circumstances of the proposed action.” Again, those circumstances remain to be determined by agencies and the courts.

It is also important to recognize that eliminating cumulative impacts will have far-reaching consequences beyond climate change analysis. The Army Corps’ PDEIS, released to the Cooperating Agency Tribes (SRST, CRST, and OST), attempts to constrain and minimize their DAPL NEPA cumulative effects analysis to the Lake Oahe crossing and other projects in the immediate vicinity. The PDEIS fails to define a suitable cumulative effects area that

¹⁰⁸ *Id.* Document 37 (Sept. 8, 2016).

¹⁰⁹ Connected actions are those proposed Federal actions that are “closely related” and “should be discussed” in the same NEPA document (40 CFR 1508.25 (a)(1)). Proposed actions are connected if they automatically trigger other actions that may require an environmental impact statement; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(1)). Connected actions are limited to Federal actions that are currently proposed (ripe for decision). Actions that are not yet proposed are not connected actions but may need to be analyzed in the cumulative effects analysis if they are reasonably foreseeable.

would allow an adequate assessment of the degree to which the DAPL – and not merely the pipeline’s physical presence adjacent to and beneath Lake Oahe – contributes negatively to air, water, and land resource impacts when considering it together with other types of federal, state, and local projects in the vicinity.

Moreover, the PDEIS minimizes and pays lip service to the doubling of the DAPL’s volume (from 575,000 bpd to 1.1 million bpd). The additional throughput is significant, making it imperative that the Army Corps conduct not just a comprehensive re-analysis of the increased risks, but also a comprehensive re-analysis of the necessary spill response required for such a massively large-volume pipeline. The Tribes’ review of the PDEIS detailed the Army Corps’ continual failed approach to achieving an adequate level of impact analysis. The analysis is devoid of an adequate assessment of the aggregate potential negative environmental, social, and economic impacts the DAPL contributes as its capacity is doubled. For example, the PDEIS otherwise relied on a hastily prepared economic “analysis” commissioned by API to support Dakota Access during the litigation to justify the “positive” economic benefits of the DAPL.¹¹⁰ The report was initially prepared as part of an amicus brief submitted in support of the DAPL after the D.C. District Court initially ordered the DAPL shut down and drained while the EIS was being prepared.¹¹¹ While the economic report touts the long-term socioeconomic benefits for North Dakota, the PDEIS – like the EA and the Army Corps’ *Analysis of Issues* before it – fails to account for the equally long-term externalized costs of the DAPL that disproportionately and negatively affect the SRST, CRST, OST, and YST (See: Section 5.2.4.1).

While opposition to the DAPL has focused on Treaty rights, cultural protection, and water quality, the issue of climate change is also critically important. The DAPL will lock in decades of new fossil fuel production and consumption, contrary to this administration’s declared goals and international commitments.¹¹² One of the key issues is the relationship between the pipeline’s authorization and the climate crisis. **The PDEIS fails to delve into the key question of whether authorization of the pipeline will contribute to more production and consumption of fossil fuels, and for longer, compared to the closure of the pipeline.** The DEIS incorrectly and unlawfully deems such impacts outside the “scope” of the NEPA analysis, and then compounds that error by assuming that the existence of the pipeline has no impact on the amount of oil that is produced or consumed. Instead, the PDEIS focuses on the relative minutiae of greenhouse gasses from construction of pipeline segments, or alternative transportation. While it is appropriate to disclose these GHG emissions, it is not the major concern. **The major concern is doubling the capacity of the DAPL and the fate of the 1.1 million bpd to be carried in the pipeline.**

The Army Corps can, and should, assess the far more meaningful question of how ongoing operation of the DAPL – presumably for decades – will impact the Tribes, and of course, the nation’s commitment to reducing GHG emissions. Just such analyses have previously been conducted for other large-scale projects. More recently, an analysis of GHGs was conducted for the now abandoned Keystone XL pipeline project.¹¹³

¹¹⁰ ICF. Economic Impacts of a Dakota Access Pipeline Shutdown. September 1, 2020. Available at: <https://www.api.org/news-policy-and-issues/energy-infrastructure/economic-impacts-of-a-dakota-access-pipeline-shutdown> (Accessed: July 1, 2021);

¹¹¹ *Standing Rock Sioux Tribe v. Army Corps of Engineers. Amici Curiae* Brief of the American Fuel and Petrochemical Manufacturers, American Petroleum Institute, and the Association of Oil Pipelines in Support of Dakota Access, LLC’s Brief on Vacatur. Case 1:16-cv-01534-JEB Document 517 at 2. (Apr. 30, 2020).

¹¹² Letter to Colonel Mark Himes, Commander and District Engineer, Army Corps of Engineers from Mike Faith, Chairman, Standing Rock Sioux Tribe (Sept. 22, 2021). Available at: <https://earthjustice.org/sites/default/files/files/srst-ca-comment-2021-07-deis.pdf> (Accessed on: Sept. 22, 2021)

¹¹³ Peter Erickson and Michael Lazarus, *Impact of the Keystone XL pipeline on global oil markets and greenhouse gas emissions*, Nature (Aug. 2014), Available at: <https://mediamanager.sei.org/documents/Publications/Climate/Erickson-Lazarus-2014-KeystoneXL-NatureCC.pdf> (Accessed on: September 22, 2021).

The Biden administration CEQ's proposed rule marks the first of a two-phased rulemaking effort to unwind the 2020 NEPA Reform Rule that the CEQ promulgated under the Trump administration to minimize the cumulative impacts of projects.¹¹⁴ The Biden-revised NEPA regulations are meant to reflect the administration's environmental policies. Companies in the energy sector, including oil and gas, renewables, manufacturing, transportation, aviation, telecom, and more will need to evaluate potential cumulative impacts of their project proposals on future projects.

03.2.4 Consideration of “Environmental Trends” as Baseline Conditions

In further response to concerns that the changes preclude consideration of climate change, the CEQ added new language to Section 1502.15's definition of “affected environment” to specify that the affected environment described in an EIS must include “reasonably foreseeable environmental trends”—which may include climate change. The CEQ explained that in appropriate cases, “trends determined to be a consequence of climate change would be characterized in the baseline analysis of the affected environment rather than as an effect of the action.” Thus, under the revised rule, the Army Corps **may consider** that the pipeline contributes to greenhouse gas (GHG) rise as part of the local environmental setting for the Bakken, but not the project's GHG emissions contribution to global, or even U.S. climate change.

As noted above, the Biden administration's CEQ proposed substantial revisions to the Trump administration rules on NEPA. As part of its two-phase process, the CEQ published a Federal Register Notice on February 19, 2021, rescinding the June 2019 “Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions” (2019 Draft GHG Guidance) issued by the Trump administration.¹¹⁵

During the Trump administration, the CEQ withdrew the 2016 GHG Guidance in April 2017,¹¹⁶ and later replaced it with the 2019 Draft GHG Guidance.¹¹⁷ The 2019 Draft GHG Guidance recommended a narrower approach to considering GHG emissions in NEPA review. The quantification of GHG emissions from a proposed action was limited to when “the amount of those emissions is substantial enough to warrant quantification” and “it is practicable to quantify them using available data and GHG quantification tools.” The 2019 Draft GHG Guidance also recommended that an agency consider whether quantifying GHG emissions would be “practicable” and “overly speculative”, and to explain the basis for such a conclusion. In addition, the 2019 Draft GHG Guidance specified that agencies need not weigh the effects of the various alternatives in a monetary cost-benefit analysis using the Social Cost of Carbon (SCC) estimates or other similar cost metrics that was part of the Obama CEQ 2016 guidance. The 2019 Draft GHG Guidance specified that agencies need not weigh the effects of the various alternatives in a monetary cost-benefit analysis using the Social Cost of Carbon (SCC) estimates or other similar cost metrics. In contrast, the 2016 GHG Guidance left the

¹¹⁴ 86 FR 55757 Available at: <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions> (Accessed on: Oct. 7, 2021).

¹¹⁵ CEQ. National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions, Notice of Recission. Available at: <https://www.federalregister.gov/documents/2021/02/19/2021-03355/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions> Accessed on May 5, 2021.

¹¹⁶ 82 FR 16576, CEQ - Withdrawal of Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. (Available at: <https://www.govinfo.gov/content/pkg/FR-2017-04-05/pdf/2017-06770.pdf>).

¹¹⁷ 84 FR 30097. CEQ. Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (June 26, 2019). Available at: <https://www.govinfo.gov/content/pkg/FR-2019-06-26/pdf/2019-13576.pdf/>

determination of whether to use a monetary cost-benefit analysis, such as the SCC, up to the agency's discretion.

In the recently issued notice, the Biden administration CEQ rescinded the 2019 Draft GHG Guidance¹¹⁸ and signaled that the CEQ will develop future revisions and updates to the 2016 GHG Guidance. The CEQ noted that, in the interim, federal agencies "should consider all available tools and resources in assessing GHG emissions and climate change effects of their proposed actions, including, as appropriate and relevant, the 2016 GHG Guidance." The Notice's language affords agencies flexibility to use the 2016 GHG Guidance.

This action, directed by President Biden's Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*¹¹⁹ reinstates Obama administration policy and requires further review and updating on how GHG emissions and the effects of climate change are considered in environmental review under the NEPA. Section 3.3 below is a separate discussion of the intersection and implications of the 2020 revised NEPA regulations and the Biden administration's EO 13990 to rely on the 2016 GHG Guidance.

03.2.5 Whether Project Effects are "Highly Controversial"

The final regulations removed the requirement in §1508.27(b)(4) that agencies consider "degree to which the effects on the quality of the human environment are likely to be highly controversial when determining whether an impact is 'significant.'" The CEQ explained that controversy is "subjective and is not dispositive of effects' significance." This change may have broad implications; as noted in the discussion above, when the D.C. District Court on July 6, 2020, ordered the DAPL to be shut down while the Army Corps prepares the EIS to consider approval of the Lake Oahe crossing easement. On July 14, the U.S. Court of Appeals for the D.C. Circuit granted a temporary administrative stay of the shutdown order pending oral argument in the case. The district court's order relied on the court's finding that the project remained "highly controversial" under the prior §1508.27(b)(4) of the NEPA regulations because the Army Corps had failed to address concerns about the risk of oil spills.¹²⁰ The Biden administration the CEQ's recently proposed NEPA rule changes do not address this topic; however, it is likely to be addressed in the second phase of the CEQ's proposed revisions expected in November 2021.

03.2.6 Limiting Consideration of the Range of Alternatives

The new regulations also incorporate provisions from the proposed rule narrowing the range of alternatives an agency must consider in an EIS. The former NEPA regulations required an EIS to "evaluate all reasonable alternatives" to a proposed project but did not define "reasonable alternative." New §1508.1(z) defines "reasonable alternatives" as a "reasonable range of alternatives that are technically and economically feasible, meet the purpose and need for the proposed action, and, where applicable, meet the goals of the Dakota Access." The final

118 86 FR 10252. National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions. (Feb. 19, 2021). Available at: <https://www.govinfo.gov/content/pkg/FR-2021-02-19/pdf/2021-03355.pdf> (Accessed: June 22, 2021) and Executive Order 13990. Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. (Jan. 20, 2021) Available at: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/> (Accessed: June 22, 2021).

119 Executive Order 13990 (Jan. 20, 2021). Available at: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis> (Accessed on May 3, 2021).

120 *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, No. 16-1534, Memorandum Opinion and Order, Documents 545 and 546 (D. D.C. July 6, 2020).

rule does not establish presumptive maximum number of alternatives for consideration (as contemplated by the proposed rule) but adds a new §1502.14(f) requiring lead agencies to “limit their consideration to a reasonable number of alternatives.” The CEQ notes that an EIS “need not include every available alternative where the consideration of a spectrum of alternatives allows for the selection of any alternative within that spectrum.” The final rule also removes a provision in the previous regulations requiring agencies to study “reasonable alternatives not within the jurisdiction of the lead agency.” The latest NEPA regulations also set parameters for considering alternatives that are “technically and economically feasible” and “meet the purpose and need of the proposed action.”

In July 2021, the Army Corps’ DAPL EIS project manager stated that the agency was following the pre-Trump NEPA rules because the NOI for the EIS was published prior to the effective date of the new NEPA rules.¹²¹ A recent review of the PDEIS released by the Army Corps to the Cooperating Agencies (SRST, CRST, and OST) shows that the Army Corps is not, as was stated; rather the agency is following the Trump-era NEPA rules.

The Trump-era NEPA rules state that alternatives must also “meet the goals of the project proponent” – in this case, ET/Dakota Access. Using these criteria, the Army Corps has attempted to put severe limits on alternatives, especially when the DAPL is already operational, albeit illegally. The Army Corps’ PDEIS also relies heavily on the D.C. Court decision that the discussion in the EA regarding reasonable alternatives meets the NEPA bar for being “sufficient.”¹²² It’s imperative that this again be challenged, as the court did not hear specific challenges to how the “desktop” route selection analysis was conducted. Furthermore, Dakota Access and the Army Corps have not responded to SRST’s technical team’s and the Cooperating Agency Tribe’s requests for the models and methodologies used in their route, spill modeling, and spill response analyses.

In one improvement promulgated under new § 1502.17, agencies must now include a summary in the EIS identifying all alternatives, information, and analyses the agency received from Tribal, State, local governments, and other public commenters. In developing the summary, agencies may also refer to other relevant sections of the EIS or to appendices. A new paragraph §1502.17 (a)(1) requires agencies to append to the Draft EIS or otherwise publish the comments received during scoping and, consistent with the proposed rule, paragraph §1502.17 (a)(2) requires the lead agency to invite comment on the summary. Finally, paragraph (b) requires agencies to prepare a summary in the Final EIS based on all comments received on the Draft EIS. The Army Corps has provided a summary scoping report to the Tribes participating as Cooperating Agencies. **Approximately 48,000 public comments were submitted to the Army Corps during the 75-day scoping period that began September 10, 2020. The Army Corps’ 6-month extension for completion of the EIS (from March 2022 to September 2022) was due, in part, to the Tribes’ request for additional time to review the volume of public comments received.**¹²³

03.2.7 Timing and Page Limits

The new rule incorporates the proposed rule’s presumptive time limits of one year for completing Environmental Assessments (EA) and two years for completing EISs, subject to possible extension by a “senior agency official.” The new rule also imposes a presumptive

¹²¹ Email from B. Cossette, Army Corps DAPL EIS Project Manager to D. Kane, WindHorse Strategic Initiatives, LLC. (July 27, 2021).

¹²² *Standing Rock Sioux Tribe v. Army Corps of Engineers*. Memorandum Opinion. Case 1:16-cv-01534-JEB Document 239 at 46. (June 14, 2017).

¹²³ *Id.* Document 612 (July 22, 2021).

limit of 75 pages for EAs and retains the current page limit for EISs of 150 pages or less (or 300 pages or less for projects of “unusual scope or complexity”). Like the time limits, these page limits are subject to extension by a senior agency official. Agencies have also generally issued NEPA guidance on page limits to meet the regulations promulgated under the federal government’s Paperwork Reduction Act.¹²⁴

03.2.8 One Federal Decision Policy – Interagency Collaboration

The new regulations promote interagency collaboration with federal, tribal, state, and local procedures, as well as joint documents to streamline the NEPA review process. In general, agencies are required “[t]o the maximum extent practicable, jointly issue environmental documents with the lead agency (40 C.F.R. §1501.8(b)(8)). “Engaging in interagency cooperation” while an EIS or EA is being prepared is now required, instead of just emphasized (§1500.5(d)). Federal agencies are also required to coordinate their environmental program websites, including use of shared databases or application programming interface...” (§1507.4(b).) Federal, tribal, state, and local agencies are permitted to “jointly prepare or adopt environmental documents...” (§§1500.4(p), 1500.5(j), 1501.7(b)). Where a proposal will require action by multiple federal agencies and/or cooperating agencies, the agencies must prepare a single EIS and issue a joint record of decision (ROD) or prepare a single EA and issue a joint finding of no significant impact (FONSI), depending on the agencies’ determination (§1501.7(g).).

03.2.9 General NEPA Compliance

§1506.11 retains from the 1978 regulations the 30-day waiting period prior to issuance of the ROD, subject to limited exceptions, and **under §1503.1(b), agencies may solicit comments on the Final EIS if they so choose.** Each commenter should put its own comments into the record as soon as practicable to ensure that the agency has adequate time to consider the commenter’s input as part of the agency’s decision-making process. Finally, to ensure commenters timely identify issues, the CEQ expresses its intention that commenters rely on their own comments and not those submitted by other commenters in any subsequent litigation, except where otherwise provided by law.

An improvement in the final rule now under §1500.3(b)(4) requires the decision maker, informed by the Final EIS (including the public comments, summary thereof, and responses thereto) **and other relevant material in the record, certify that she or he considered the alternatives, information, and analyses submitted by tribes, states, local governments, and other public commenters. Relevant material includes both the draft and Final EIS as well as any supporting materials incorporated by reference or appended to the document.**

Consistent with their statutory authorities, agencies may now impose, as appropriate, bond and security requirements or other conditions as part of their administrative processes, including administrative appeals, and a prerequisite to staying their decisions. This may be onerous and burdensome and has little legal authority. As the CEQ is attempting to legislate, a power reserved exclusively to Congress, this regulation will almost definitely be litigated when an agency attempts to apply this to a NEPA project.

¹²⁴ See: [44 U.S.C. §§3501-3521](#)

Another important consideration for the DAPL EIS is that 2020 NEPA revisions allow agencies (as well as Dakota Access) to consider measures (e.g., “mitigation”) that might serve to anticipate, reduce, or eliminate possible adverse effects from a project. To the extent such measures are incorporated into an agency’s ROD, they may provide grounds upon which a court, presented with an alleged violation of NEPA, might reasonably conclude that injunctive relief is not warranted because the measures prevent any irreparable harm from occurring (See §1505.3). Regular inspections or requirements that Dakota Access obtain third-party insurance, for example, might constitute such measures in certain circumstances.

The 2020 NEPA regulations also define a new section, “Severability,” (See: §1500.3) to address the possibility that the final rule, or portions of this rule, may be challenged in litigation. The CEQ’s intention was to ensure that the individual sections of this rule be severable from each other, and that if a court stays or invalidates any sections or portions of the regulations, it will not affect the validity of the remainder of the sections, which will continue to be operative. The CEQ again appears to be trying to legislate what can and can’t be addressed in the courts, a power that they do not possess and is reserved for the legislative branch; that is, Congress. This “regulation” is in the process of being litigated and the courts may well strike this from the revised NEPA regulations.

03.2.10 NEPA Compliance During Emergencies

The final rule also amends §1506.12, which allows agencies to make “alternative arrangements” for NEPA compliance during an emergency. The new rule clarifies that such alternative arrangements must still comply with NEPA §102(2)(C)’s requirement for a “detailed statement.” The preamble notes that “the CEQ has approved alternative arrangements to allow a wide range of proposed actions in emergency circumstances including.... infectious disease outbreaks.” In response to the COVID-19 pandemic, President Trump issued E.O. 13927 on June 4, 2020, requiring federal agencies to take “all reasonable measures” to speed infrastructure investments by, among other things, identifying planned or potential actions to facilitate the nation’s economic recovery that may be subject to emergency treatment as “alternative arrangements” under the NEPA regulations.

03.2.11 NEPA “Threshold” Applicability

The CEQ added to §1501.1 to provide a series of considerations to “assist” agencies in a threshold analysis for determining whether NEPA applies to a proposed activity or whether NEPA is satisfied through another mechanism. In the final rule at Section 1501.1, “NEPA thresholds,” recognizes that the application of NEPA by Congress and the courts has evolved over the last four decades considering numerous other statutory requirements implemented by Federal agencies. The CEQ reorders these considerations in the final rule and adds a new consideration to paragraph (a)(1)—**whether another statute expressly exempts a proposed activity or decision from NEPA.**

These thresholds require consideration of (1) whether the proposed action is expressly exempt from NEPA under another statute; (2) whether compliance with NEPA would clearly and fundamentally conflict with the requirements of another statute; (3) whether compliance with NEPA would be inconsistent with Congressional intent expressed in another statute; (4) whether the proposed action is a major Federal action; (5) whether the proposed action, in whole or in part, is a non-discretionary action for which the agency lacks authority to

consider environmental effects as part of its decision-making process; and (6) whether the proposed action is an action for which another statute's requirements serve the function of agency compliance with the Act. (40 C.F.R. §1501.1(a)). Federal agencies are permitted to make determinations based on these considerations in their agency procedures or on an individual basis (§1501.1(b)).

03.2.12 Public Participation and Comment

Not surprisingly, the Trump NEPA revisions were designed to limit procedural hurdles to public participation and litigation. §1501.9 (c) on Scoping defines “scoping outreach” as a part of the scoping process that agencies *may conduct* in the form of public scoping meetings, publish scoping information or “other means to communicate with those persons or agencies who may be interested or affected, which the agency may be integrated with any other early planning meeting the agency has. Such a scoping meeting will often be appropriate when the impacts of a particular action are confined to specific sites.” In short, this is a blatant attempt to give agencies a way to narrow from whom they solicit information, while limiting transparency and the public’s ability to participate in the NEPA process. **By using language like “specific sites,” the intent is to limit commenters to those in the immediate vicinity of a proposed project. Furthermore, the intent is to constrain the ability of national environmental and social/environmental justice organizations from mobilizing their membership constituencies on controversial projects, such as the DAPL EIS, to limit the tens of thousands of comments that get submitted during public scoping or following publication of draft and Final EISs. It is likely that impending legal challenges would result in the courts striking this “rule” that only attempts to curtail citizens’ rights to free speech and due process, as protected under the First (freedom of speech) and Fourteenth (equal protection) Amendments of the Constitution.**

While the CEQ claims the new regulations facilitate public participation, the updated regulations also violate the First and Fourteenth Amendment of the Constitution:

- + **Diminished noticing requirements and increase substantive requirements for commenters.**
- + **Eliminated the “Policy” provision that required agencies to encourage and facilitate public involvement in decisions that affect the quality of the human environment.**¹²⁵
- + **Removed the provision stating that, “NEPA procedures must [e]nsure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.”**¹²⁶
- + The scaling back of these requirements **reflects a de-emphasis on public participation in the environmental review process.**
- + **Removed the requirement that agencies give “notice by mail to national organizations reasonably expected to be interested in the matter and may include listing in the**

¹²⁵ See 40 C.F.R. §1500.2 (1978).

¹²⁶ 40 C.F.R. §1500.1(a) (1978).

102 Monitor” and now permits such notice through publication in the Federal Register only.¹²⁷

- + While EISs, comments, and underlying documents are still available via the provisions of the Freedom of Information Act (FOIA), the new regulations **eliminated the requirement to make these materials publicly available without charge to the extent practicable.**¹²⁸
- + **Added a definition of “publish and publication,” which gives broad authority to agencies to determine which methods “efficiently and effectively make environmental documents and information available for review by interested persons...”**¹²⁹
- + **When deciding whether to hold public hearings and meetings, agencies no longer need to consider whether there is “[s]ubstantial environmental controversy concerning the proposed action or substantial interest” or requests “for a hearing by another agency with jurisdiction over the action...”**¹³⁰
- + **Restricted the time frame for making public comments.**¹³¹ Federal agencies now:
 - **May set a deadline for providing public comments on an EIS, rather than being required to allow comments for a specific number of days.**
 - **Are not permitted to grant additional time to comment beyond the deadline.**
- + **Public commenters are required to “provide as much detail as necessary to meaningfully participate and fully inform** the agency of the commenter’s position (putting additional burden on the public to be “experts” and giving agencies latitude to ignore comments they arbitrarily determine do not meet an undefined standard for “detail”).
 - Comments should explain why the issues raised are important to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and employment impacts, and other impacts affecting the quality of the human environment.
 - Comments should reference the corresponding section or page number of the Draft EIS, propose scientific changes to those parts of the statement, where possible, and include or describe the data sources and methodologies supporting the proposed changes.”¹³²
 - Comments should also “be as specific as possible.”¹³³

Additionally, the CEQ has made **participation more burdensome** by:

- + Formalizing and arguably expanding the NEPA “exhaustion”¹³⁴ requirement, including:

127 40 CFR §1506.6 (b)(2) (2020).

128 40 CFR §1506.6 (f). (2020)

129 40 CFR §1508.1(y) (2020)

130 40 CFR §1506.6(c) (1978).

131 40 CFR §1503.1(b) (2020).

132 40 CFR §1503.3(a). (2020)

133 40 CFR §1503.3(b). (2020)

134 The doctrine of exhaustion of administrative remedies says that a person challenging an agency decision must first pursue the agency’s available remedies before seeking judicial review. It **was** created by courts to promote an efficient justice system and autonomous administrative state.

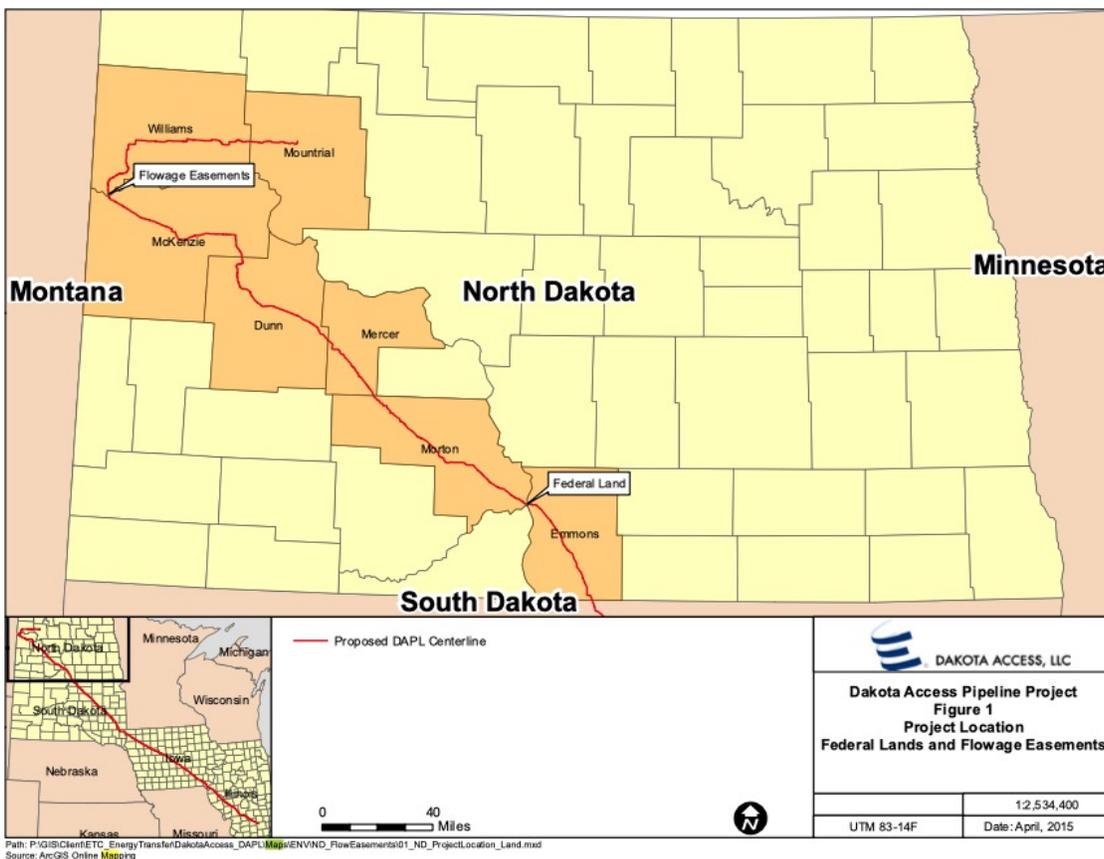
- ➔ A requirement that commenters **identify “any relevant information, studies, or analyses of any kind concerning impacts affecting the quality of the human environment” during the comment period.**¹³⁵
- ➔ **Comments, information, or objections not submitted by the comment deadline shall be forfeited as not exhausted.**¹³⁶
- ➔ **Timely comments will be included [by commenters] in a “summary of submitted alternatives, information, and analyses” section** for the lead and cooperating agencies to consider in preparing the Draft EIS, as well as published in the Final EIS.¹³⁷

An exhaustion requirement makes participation more burdensome, as it obligates commenters to identify all possible environmental issues at the outset of the review process or risk forfeiting those claims. These additional timing and substantive requirements will likely reduce the number of public comments received, as compliance with them requires greater expertise on the part of commenters.

03.2.13 EPA and Other Agency Reviews of EISs

Section 309 confers upon EPA broad review responsibilities for proposed federal actions, including EAs and EISs. Any proposal that the lead agency maintains does not require an EIS,

» Figure 3-3. DAPL Draft EA project location map with tribal reservations omitted, 2015.



but that EPA believes constitutes a major federal action significantly affecting the environment empowers EPA to require an EIS.¹³⁸ The CEQ regulations designate EPA the official recipient

135 40 CFR §1500.3(b)(3).
 136 *Id.*
 137 40 CFR §1502.17.
 138 42 U.S.C. §7609 (1970). See: <https://www.epa.gov/nepa/epa-review-process-under-section-309-clean-air-act>. Accessed on May 21, 2021.

of all Final EISs, a responsibility the EPA Administrator delegates to the Office of Federal Activities (OFA). The EPA Administrator also has delegated responsibility for overseeing the national program manager to the Office of Federal Activities (OFA), and to the ten EPA Regional Administrators for review of regional specifications.

OFA has developed a set of criteria for rating the quality of the impacts (“lack of objections (LO); environmental concerns (EC); environmental objections (EO); or environmentally unsatisfactory (EU)”) and the adequacy (Adequate (1); Insufficient (2) information; or unsatisfactory (3)) of draft EISs. The ratings system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft. If improvements are not made in the Final EIS, EPA may refer the Final EIS to the CEQ.¹³⁹ In any given year, EPA may review more than 500 EISs. In 2018, EPA reviewed over 330 federal EISs.¹⁴⁰

In its review of the DAPL EA, the EPA exercised its authority and first issued a letter to the Army Corps commenting that the Draft EA lacked due diligence on the North Dakota portion of the project in terms of providing sufficient scope and information for analysis. In addition, EPA commented that the EA lacked the attention to detail of two other recent EAs the Army Corps prepared for crude oil pipelines in North Dakota (Bakkenlink and Sacagawea).¹⁴¹ The EPA’s March 11, 2016 letter to the Army Corps expanded by elaborating on potential impacts of the DAPL to the Tribes’ drinking water; concerns about Dakota Access’ lack of suitable emergency preparedness; concerns about potential impacts to the Standing Rock Sioux Reservation (due to spills, spill monitoring system, and pointing out the project area map for the Draft EA made no indication of the location of either Tribal lands or reservations (Figure 3-3); questions about the environmental justice analysis methods, inputs, and conclusions; a lack of meaningful government-to-government consultation with the Sioux Tribes; and criticism of the methodology and criteria used to model and select the preferred pipeline route.¹⁴²

The Trump CEQ’s revised NEPA regulations do not appear on the surface to be an attempt to diminish his EPA’s role in providing oversight under NEPA. The intent, however, was to further politicize his EPA to allow the agency to attempt to exercise its authority under (read: control over) Section 309(b) of the Clean Air Act (CAA) to review and rank EISs, and give the agency latitude to bypass its authority and refer the matter to the CEQ, as stated in paragraph (b).¹⁴³ The final rule revises the language to soften the NEPA’s intent, changing it from passive to active voice. Paragraph (c) provides those other Federal agencies also may prepare such reviews. The final rule changed this phrase to “may prepare.”

03.2.14 Agency Responsibility for NEPA Documents

Trump’s CEQ revised §1506.5, “Agency responsibility for environmental documents,” is in response to comments urging the CEQ “to allow greater flexibility for the project sponsor (including private entities) to participate in the preparation of NEPA documents under the supervision of the lead agency.” The CEQ has also relaxed **oversight of non-agency**

139 The “pre-decision referrals” provision (40 CFR Part 1504) enables any federal agency under NEPA to refer another agency’s final EIS to CEQ during the 30-day waiting period before a lead agency can proceed with the action. On the other hand, Section 309 authorizes EPA to refer to CEQ a broader range of federal activities, not only actions for which EISs are prepared. CEQ regulations (40 CFR 1504.1(b)) implement Section 309 of the Clean Air Act, acknowledging that EPA has been assigned more extensive review and referral authority than the other agencies.

140 National Association of Environmental Professionals (NAEPP). 2018 Annual NEPA Report of the National Environmental Policy Act (NEPA) Practice. Submitted to NAEP Board of Directors. (November 2019). Available at: https://naep.memberclicks.net/assets/documents/2019/NEPA_Annual_Report_2018.pdf. Accessed on May 21, 2021.

141 Philip Strobel, EPA Director of NEPA Compliance and Review Program, Office of Ecosystems Protection and Remediation. Letter to Brent Cossette, U.S. Army Corps of Engineers Omaha District. Ref: 8EPR-N. (Jan. 8. 2016).

142 *Id.* (March 11, 2016).

143 40 CFR §1504.1

contractors in EIS and EA preparation. Contractors no longer need to be approved or selected by a lead or cooperating agency before preparing the EIS or EA. Contractors and Dakota Access also do not need to include privileged or confidential trade secrets or other confidential business information in their disclosure statements accompanying an EA or EIS, nor do they need to specify that they have no financial or other interest in the outcome of the project.¹⁴⁴ The CEQ stated that they had “intended for these changes to improve communication between proponents of a proposal for agency action and the officials tasked with evaluating the effects of the action and reasonable alternatives, to improve the quality of NEPA documents and efficiency of the NEPA process.”¹⁴⁵ This is wishful thinking, at best, but quite an effort to mute NEPA.

Interestingly, §1502.18, paragraph (b)(3) requires the agency to include the names and qualifications of the persons who prepared the environmental document, adding “qualifications” to be consistent with §1502.18 for which the CEQ stated is important for transparency. For an EIS, this information would be included in the list of preparers as required by §1502.18, but agencies have flexibility on where to include such information in an EA. This revision may benefit opponents of projects if it can be proven that the qualifications of the EA or EIS are unsuitable for the level of analysis required to assess project impacts. This very situation also arose in the DAPL EA, where the Army Corps only listed the titles, but did not list the names and qualifications of their staff involved in the document preparation. Similarly, the technical qualifications of the third-party contractor should have received greater scrutiny. Such scrutiny will be a key focal point to note and potentially challenge once the Draft EIS is published.

It is unclear what the Army Corps’ process was in issuing a government contract with ERM, the DAPL third-party EIS contractor, or whether Dakota Access has contracted with ERM because of its history of promoting ET/Sunoco pipeline projects. In 2016, ERM participated in publishing a report for the “Greater Philadelphia Action Team” to promote pipelines carrying natural gas liquids (NGLs) to the greater Philadelphia area. The “Action Team” Steering Committee Members included ET/Sunoco. Authorship of the report included ERM. The report clearly was aimed at promoting the proposed ET pipelines across Pennsylvania to the Philadelphia area and emphasized that the most “notable projects” are the ET/Sunoco Logistics Mariner I, II and III expansion pipelines.

As a Delco Daily Times editorial¹⁴⁶ made clear, the purpose of the report was to support Sunoco’s proposal for additional pipelines across Pennsylvania to Sunoco’s Marcus Hook plant: “To buttress that argument, Rinaldi, who leads the Greater Philadelphia Chamber of Commerce’s Greater Philadelphia Energy Action Team, rolled out a 64-page report called “A Pipeline for Growth.”¹⁴⁷

In the report section entitled “Addressing Environmental Risks and Employing Industry Best Practices” the report identified potential impacts such as wetland and stream degradation. The report that included ERM authorship stated there would be no environmental impacts due to the strong environmental regulations and developers’ “best management practices” including the use of horizontal directional drilling.

144 40 CFR §1506.5(b)(4).

145 85 FR at 43337 (July 16, 2020).

146 See: https://www.delcotimes.com/opinion/editorial-the-pipeline-debate-is-just-beginning/article_bc89978f-41c7-53a5-841b-9129af16d181.html Accessed on June 18, 2021.

147 Available at: <http://legacy.chamberphl.com/download/public/gpeat16-report.pdf>

In 2021, the paid advertising for ET/Sunoco's pipelines turned into an environmental disaster for the residents along the path of the Mariner pipeline projects. The project has led to severe wetland and stream degradation and resulted in millions of dollars in fines to ET including the release of millions of gallons of HDD drilling fluid. In May 2020, it was revealed that the Pennsylvania Department of Environmental Protection (DEP) issued an additional 680 violations for stream pollution, erosion and pipeline route slip leading to slides and stability issues according to the DEP. ERM played a role promoting the ET pipelines and their "best management practices" that turned out to be anything but. Now this same consultant is poised to render technical judgements about another ET pipeline –the DAPL. ERM's past ET promotion, wildly inaccurate technical judgements, and conflicts of interest make them highly inappropriate for their role as the Army Corp's DAPL EIS "third party" consultant.

Even if ERM discloses their financial associations and interest in the DAPL project through their work with ETP, the ethics of their staff leading the preparation of the EIS are, to say the least, questionable.¹⁴⁸ Ms. Maggie Suter, ERM's EIS project manager is a former Federal Energy Regulatory Commission (FERC) environmental engineer, intergovernmental affairs coordinator, and branch chief staffer who was FERC's environmental project manager for the Spectra Energy's Algonquin Incremental Market (AIM) Atlantic Bridge gas pipelines on which her husband was a consultant.¹⁴⁹ Ms. Suter was FERC's lead author for the AIM and Atlantic Bridge EAs.

The Army Corps' EIS "independent" third party contractor ERM is also a member of the API who has entered an *Amicus* brief in support of ET against the Tribe on the DAPL. API stated in their *amicus* brief that:

"In light of PHMSA's pervasive regulatory framework, DAPL will operate safely while the Army Corps prepares an EIS on remand required by the Court's March Opinion. The Corps' additional environmental analysis (that will inevitably recognize PHMSA regulatory requirements) can thus be expected to support a Corps decision to maintain the DAPL easement. Moreover, even if the Corps concludes through its preparation of an EIS that impacts resulting from DAPL are significant, that will not preclude the Corps from proceeding to affirm the DAPL easement."¹⁵⁰

During the recent government-to-government consultation with the OST on October 8, 2021, the Army Corps' Omaha District Commander and District Engineer, Colonel Mark Himes, stated that the agency's internal evaluation of their NEPA third-party contractor, ERM, determined there was "no conflict of interest." This despite question and statements by Oglala Sioux tribal member and NDN's President and CEO, Nick Tilsen, regarding ERM's membership in the API, North America's largest oil and gas trade group.¹⁵¹ Colonel Himes also stated he was "unaware" of ERM's membership in API.¹⁵²

03.2.15 Remedies

148 See: [https://www.delawariverkeeper.org/sites/default/files/FERCDossierConsultantConflictsOfInterestPDF with attach_0.pdf](https://www.delawariverkeeper.org/sites/default/files/FERCDossierConsultantConflictsOfInterestPDF%20with%20attach_0.pdf)

149 See: <https://www.desmog.com/2016/11/01/exposed-husband-ferc-official-responsible-reviewing-new-spectra-energy-pipelines-consults-spectra-related-project/>

150 *Standing Rock Sioux Tribe v. Army Corps of Engineers*. Amici Curiae Brief of the American Fuel and Petrochemical Manufacturers, American Petroleum Institute, and the Association of Oil Pipelines in Support of Dakota Access, LLC's Brief on Vacatur. Case 1:16-cv-01534-JEB Document 517 at 2. (Apr. 30, 2020).

151 Statement of Nick Tilsen, Oglala Sioux Tribe Member and President and CEO of NDN Collective to Colonel Mark Himes, Army Corps Commander and District Engineer, Omaha District (Oct. 8, 2021). Available at: <https://www.facebook.com/THEOGLALANATION/videos/482240193489923/> (Accessed on: Oct. 9, 2021).

152 *Id.*

The CEQ has emphasized that the new regulations do not expand a potential litigant's options for suing an agency for NEPA violations. The new regulations "create no presumption that a violation of NEPA is a basis for injunctive relief or for a finding of irreparable harm." (40 C.F.R. §1500.3(d)). Additionally, the regulations "do not create a cause of action or right of action for violation of NEPA, which contains no such cause of action or right of action" (*Id.*). Further, "minor, non-substantive errors that have no effect on agency decision-making shall be considered harmless and shall not invalidate an agency action" (*Id.*). This last addition opens the door for agencies to argue that an identified error is minor because it would not have affected their decision.

03.2.16 Other Issues

The final rule incorporates other changes from the proposed rule, including procedural changes to allow agencies to begin the scoping process for a proposed project that is "sufficiently developed" rather than requiring publication of a Notice of Intent (NOI); a new requirement to include a cost estimate in an EIS cover sheet; allowing agencies to rely on existing scientific and technical information in NEPA reviews; and encouraging agencies to identify activities or decisions not subject to NEPA in their agency-specific NEPA procedures.

03.2.17 Conclusion

As a result of these new regulations, federal agencies will be required to develop or revise proposed NEPA procedures to implement the changes within a year of the effective date. (40 C.F.R. §1507.3(b)). These procedures should have an emphasis on "efficiency." (§1507.3(c)). Agencies' proposed procedures will be subject to review by the public and by the CEQ for conformity with NEPA and the new regulations (Section 1507.3(a)(2)). Federal agencies are prohibited from imposing additional procedures or requirements beyond those delineated in the new regulations (*Id.*). Agencies are also barred from relying on previous guidance that conflicts with the new regulations, except for existing agency CEs, which have been deemed by the CEQ to be consistent with the regulations (Sections 1506.7, 1507.3(a)). Ongoing activities and environmental documents that began before the effective date are permitted to rely on either the old or new regulations (§1506.13).

A 137-page legal analysis by the Natural Resources Defense Council (NRDC) submitted to the CEQ noted that the CEQ's rulemaking process exhibited, "repeated failures to cite any evidence that supports the many implicit or explicit factual premises on which the rulemaking proposal rests."¹⁵³ NRDC further chastises the CEQ for repeatedly and erroneously proposing NEPA rules that, for example, "require other federal agencies to adopt a number of procedural requirements designed to limit public participation, restrict access to the courts, and narrow judicial review."¹⁵⁴ NRDC notes the CEQ's exhaustion requirements are "untethered from any statutory authority that the CEQ has."¹⁵⁵ NRDC then proceeds to excoriate the CEQ's lack of constitutional scholarship in their rulemaking, pointing out that the CEQ's "intention" is to have courts review NEPA compliance only at the times and in the ways that the CEQ prefers;¹⁵⁶ presumes to instruct courts on what evidentiary weight ("conclusive") they should give to an agency

¹⁵³ NRDC (Sharon Buccino, Senior Director, Lands Division, Nature Program *et al.*) at 5. Proposed Revisions to Regulations Implementing the National Environmental Policy Act. Comments submitted to Docket No. CEQ-2019-0003. (March 10, 2020). Available at: <https://www.nrdc.org/sites/default/files/nrdc-comment-letter-ceq-nepa-20200310.pdf>. (Accessed on April 23, 2021).

¹⁵⁴ *Id.* at 6.

¹⁵⁵ *Id.* and See §1503.3(b), 85 Fed. Reg.

¹⁵⁶ *Id.* §1500.3(c), 85 Fed. Reg.

official's self-serving and conclusory certification of consideration;¹⁵⁷ and attempts to direct federal courts' exercise of their equitable and remedial authority.¹⁵⁸ NRDC then goes on to point out that "These [final rules]...are certainly *ultra vires*, because the CEQ has no authority to adopt them. Federal agencies have no inherent lawmaking power. Instead, their authority to issue regulations with the force of law must come from Congress.¹⁵⁹ That's missing here."¹⁶⁰

NRDC also chided the CEQ for its frivolousness and blatant disregard for the law by pointing out that, "The CEQ's invocation of the federal 'Housekeeping Statute' as authority for its rulemaking is particularly puzzling."¹⁶¹ Citing case law, NRDC states, "The Housekeeping Statute was passed in 1789 to help General Washington get his administration underway by spelling out the authority for executive officials to *set up offices and file government documents*. [emphasis added]¹⁶²...the CEQ's proposals to limit public comment, restrict access to the courts, and limit judicial review, are not regulations of the CEQ's own affairs, but rather, attempts by the CEQ to require the heads of *other* agencies to issue regulations that restrict the rights of *the public* and the prerogatives of the *federal judiciary*. The Housekeeping Statute does not authorize this." NRDC proceeds to point out that, "Nor can the several Executive Orders cited in the Notice of Proposed Rulemaking ("NPRM") fill the gap in necessary authority. "The legislative power of the United States is vested in the Congress," not the President, "and the exercise of quasi-legislative authority by governmental departments and agencies must be rooted in a grant of such power by the Congress and subject to limitations which that body imposes."¹⁶³

The new regulations that took effect on September 14, 2020, allows agencies to elect to apply them to NEPA reviews that are currently in progress (§1506.13). However, in the case of the DAPL, it is expected that the Army Corp is exercising caution. Though the intent is to speed up the NEPA process, for now, utilizing the new rule has already led to the NEPA overhaul being challenged in litigation, including NRDC.^{164,165,166} As noted throughout Section 3.2 of this report, the final rule faces significant legal challenges from the Biden administration, environmental and social justice groups, states, and other stakeholders. The rule may also face challenges under the Congressional Review Act, which allows Congress to invalidate federal agency rulemakings by enacting a joint resolution of disapproval following transmittal of the rule to Congress.¹⁶⁷

On June 21, 2021, the U.S. District Court for the Western District of Virginia dismissed a challenge by conservation groups to the Trump administration's 2020 Rule. The court found that the claims were not ripe and that plaintiffs lacked standing, leaving questions about the substance of the changes in limbo. The Biden administration's CEQ has also motioned to the

157 *Id.* §1502.18, 85 Fed. Reg.

158 *Id.* §1500.3(d), 85 Fed. Reg.

159 *See, e.g., City of Arlington v. FCC*, 133 S. Ct. 1863, 1869 (2013); *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 472-73 (2001); *Lyng v. Payne*, 476 U.S. 926, 937 (1986)

160 *Id.* at 6.

161 5 USC §301.

162 *U.S. ex rel. O'Keefe v. McDonnell Douglas Corp.*, 132 F.3d 1252, 1254 (8th Cir. 1998) (emphasis added) (citation omitted).

163 NRDC at 8 citing *Chrysler Corp. v. Brown*, 441 U.S. at 302 (1979).

164 Nicholas Iovino. Lawsuit challenges Trump's overhaul of environmental review waw. Courthouse News Service. (July 29, 2020) Available at: <https://www.courthousenews.com/lawsuit-challenges-trumps-overhaul-of-environmental-review-law/> (Accessed on: May 9, 2021).

165 Niina H. Farah. Enviro to court: Trump 'cut every corner' on NEPA overhaul. E&E News. (July 29, 2020). Available at: <https://www.eenews.net/stories/1063651049> (Accessed on: May 9, 2021).

166 NRDC. To Defend NEPA, Coalition Takes Trump Administration to Court. Blog post (August 6, 2020). Available at: <https://www.nrdc.org/experts/nrdc/defend-nepa-coalition-takes-trump-administration-court>. (Accessed on May 9, 2021).

167 5 U.S.C. 8: Congressional Review of Agency Rulemaking. Available at: <https://uscode.house.gov/view.xhtml?path=/prelim@title5/part1/chapter8&edition=prelim>. (Accessed on May 9, 2021). See also: CRS. The Congressional Review Act (CRA): Frequently Asked Questions (Jan. 14, 2020. Update). Available at: <https://fas.org/sgp/crs/misc/R43992.pdf>. (Accessed on May 9, 2021).

court to rule on this critical issue while it proceeds to make critical changes to the Trump-era NEPA rules in the CEQ's two-phase rulemaking process.

In addition, the 2020 the CEQ Regulations have been challenged in five separate cases in federal district courts across the country. As a result, substantial changes in how federal agencies weigh the impacts of GHG emissions and effects of climate change when issuing project approvals and making other major decisions are anticipated.

The immediate impact of the U.S. District Court for the Western District of Virginia is that the challenged rules continue to remain in effect. This creates some uncertainty for federal agencies and project proponents, as the Biden administration wrestles with how to reverse at least some of the substantive changes made in the 2020 Rule. For example, through [Secretarial Order 3399](#), Secretary of the Interior Deb Haaland announced that the 2020 Rule should not be applied "in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect."¹⁶⁸ Other agency secretaries may follow Secretary Deb Haaland's lead and issue their own secretarial order as a work around.

As part of its ongoing review of prior administration policies, the White House has committed to fully evaluating the CEQ's 2020 Regulations, and the CEQ's new proposed rulemaking is likely to reverse and significantly revise those regulations. The CEQ had announced in its Spring 2021 Unified Regulatory Agenda that it will be undertaking this two-phased approach for revising the 2020 Rule. Thus far, the current phase 1 implementation seems to extend beyond the CEQ's initial proposal to make "narrow changes" to more immediately address the climate crisis domestically, and as part of the Biden administration's agenda to lead climate action abroad. Phase 2 proposals are yet unknown, but it is hoped that any proposed "broader changes," slated for announcement in November 2021, will impact how the Army Corps proceeds in its decision-making process for the DAPL.

03.3 Biden Executive Orders, Climate Change, and the DAPL EIS

While the Biden administration made good on its campaign promise to shutter the Keystone XL Pipeline (KXL), such a promise was not upheld for the DAPL.¹⁶⁹ However, as discussed in Section 3.2 above, the 2020 NEPA revisions under the Trump administration have implications for the DAPL EIS where it could intersect with Biden's the CEQ proposed rulemaking for NEPA, EO 13990, and rescission of the 2019 GHG Guidance. This section contains a brief explanation of how the impact of the Biden administration EO could impact the Army Corps' treatment of the GHG analysis in the DAPL EIS.

The CEQ's regulations implementing NEPA do not expressly address consideration of GHG emissions or the effects of climate change. Although agency guidance lacks the legal

¹⁶⁸ DOI Secretarial Order No. 3399. (April 16, 2021). Available at: https://www.doi.gov/sites/doi.gov/files/elips/documents/so-3399-508_0.pdf. (Accessed on: May 3, 2021).

¹⁶⁹ Alexandra Kelley. Despite campaign promise, Biden administration won't shut down Dakota Access Pipeline 'at this time'. The Hill. (Apr. 12, 2021). Available at: <https://thehill.com/changing-america/sustainability/environment/547730-despite-campaign-promise-biden-administration>. (Accessed on Apr. 12, 2021).

authority and enforceability of federal regulation, the CEQ guidance on this topic has been the key framework used by federal agencies when undertaking NEPA review. With President Biden's issuance of EO 13990, energy, infrastructure, and other projects subject to NEPA review, including the DAPL, are likely to have to consider the impacts of GHG emissions and climate change effects before the Army Corps can issue a permit for the Lake Oahe crossing.

While it would seem the Army Corps would need to address the effect of climate change, the PDEIS prepared by the Army Corps has attempted to limit the discussion to the proposed action, the Lake Oahe crossing, while minimizing the overall contribution of the DAPL to climate change using the Trump-revised NEPA regulations.

In August 2016, the CEQ under the Obama administration issued final guidance for federal agencies to consider GHG emissions and the effects of climate change in NEPA reviews (2016 GHG Guidance; Table 3-1).¹⁷⁰ The 2016 GHG Guidance directed federal agencies to quantify the direct and indirect GHG emissions of a proposed action and weighed climate change impacts in considering alternatives and in analyzing mitigation strategies. The CEQ guidance also recommended that agencies include a qualitative analysis of climate change impacts when quantification tools, methodologies, and/or data inputs are not reasonably available to quantify GHG emissions.

President Biden's EO 13990 is a significant development with possible implications for the DAPL EIS, which now intersects with the CEQ's July 2020 finalized and substantial revisions to its NEPA regulations, 40 C.F.R. Parts 1500-1508¹⁷¹ and the CEQ's proposed rulemaking for NEPA.¹⁷² In the 2020 Regulations, the CEQ removed the definition distinguishing between "direct" and "indirect" effects and eliminated the requirement to consider "cumulative" effects. In addition to the existing requirement that effects considered in NEPA analyses must be reasonably foreseeable, effects must also have a "reasonably close causal relationship" to the proposed action or alternatives being analyzed in the NEPA review, consistent with a U.S. Supreme Court's decision, *Department of Transportation v. Public Citizen*.¹⁷³ Under this standard, a "but for" causal relationship is insufficient.

The 2020 CEQ Regulations go a bit further, stating that effects "should generally not be considered if they are remote in time, geographically remote, or the product of a lengthy causal chain."¹⁷⁴ The 2020 CEQ Regulations also exclude from analysis effects the agency "has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action."¹⁷⁵

170 CEQ. Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. Memorandum for Heads of Federal Department and Agencies (Aug 1, 2016). Available at: https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf. (Accessed on May 11, 2021).

171 85 FR 43304 (July 16, 2020).

172 86 FR 55757 Available at: <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions> (Accessed on: Oct. 7, 2021).

173 *Department of Transportation v. Public Citizen*, 541 U.S. 752, 767 (2004).

174 40 C.F.R. §1508.1(g)(2) (2020)

175 *Id.*

Table 3-1. Summary of the 2016 CEQ Greenhouse Gas Guidance reinstated by the Biden administration.

The CEQ's 2016 guidance is a policy recommendation to federal agencies versus a formal legal requirement and therefore does not have the same authority as a federal rule or regulation.

The guidance does not establish any particular quantity of GHG emissions as representing a significant burden on the environment – that determination will be left to the discretion of the agencies. However, the guidance does prohibit the so-called “*de minimis approach*” where an agency would compare a federal action’s GHG emissions to global GHG emissions, finding that since the action did not represent a meaningful percentage of the global GHG inventory, the action did not significantly affect the environment.

Environmental groups consistently challenge agency approvals related to infrastructure and other major projects on public lands (such as mines, oil and gas extraction, and pipelines), claiming that agencies did not adequately evaluate climate change impacts under NEPA. Projects on public lands already require environmental assessments under NEPA, but agencies under the 2016 guidance are directed to quantify the direct and indirect GHG emissions and weigh climate change impacts in considering alternatives and in analyzing mitigation strategies. The added layer of complexity that comes with this may make obtaining and defending public lands approvals more challenging for project proponents.

Key Elements of the 2016 Guidance

- + Recommends that agencies quantify a proposed agency action’s projected direct and indirect GHG emissions, taking into account available data, and GHG quantification tools that are suitable for the proposed agency action.
- + Recommends that agencies include a qualitative analysis of climate change impacts where quantification tools, methodologies, and/or data inputs are not reasonably available to quantify GHG emissions.
- + Recognizes the difficulty in attributing specific climate impacts to individual projects and recommends that agencies use the GHG emissions profile of the proposed action as a proxy for assessing the potential climate change impacts of the proposed action.
- + Encourages agencies to draw on their experience and expertise to determine the appropriate level (broad, programmatic, or project- or site-specific) and the extent of quantitative or qualitative analysis required to comply with NEPA.
- + Counsels agencies to consider alternatives that would make the action and affected communities more resilient to the effects of a changing climate.
- + Recommends consideration of short- and long-term effects and benefits in the alternatives and mitigation analysis.

Table 3-1. Summary of the 2016 CEQ Greenhouse Gas Guidance reinstated by the Biden administration (continued).

+ Quantification of GHG Emissions

- Recommends that agencies “quantify a proposed agency action’s projected direct and indirect GHG emissions,” without reference to a threshold so long as pertinent tools and data are available. According to the final guidance, agencies should consider the “rule of reason” inherent in NEPA and “the concept of proportionality” to determine the extent of analysis, “taking into account available data and GHG quantification tools that are suitable for the proposed agency action.”
- While many agencies have included qualitative discussions of GHG emissions in NEPA review, the change in the final guidance means that many more projects will be subject to a quantitative calculation of GHG emissions in NEPA review as quantification tools and methodologies are now widely available.

+ Use of the Social Cost of Carbon Estimates

- Less emphasis on the Social Cost of Carbon estimates as a tool in NEPA review, emphasizing that the appropriate method for doing cost-benefit analysis should be left to the agency’s discretion, taking into account established practices.¹⁷⁶

+ Consideration of Upstream and Downstream Emissions

- The CEQ returns to the 2016 guidance on “reasonably foreseeable direct and indirect emissions” which contain footnotes that give examples of how agencies should consider such effects.
- Notably, the examples provided strongly suggest that the CEQ believes most fossil fuel supply chain projects have reasonably foreseeable indirect GHG emissions that should be quantified and analyzed: “For actions such as a federal lease sale of coal for energy production, the impacts associated with the end-use of the fossil fuel being extracted would be reasonably foreseeable combustion of that coal.”
- However, the 2016 guidance also recognizes that there may be situations where information for quantification is unavailable and/or the complexity of comparing emissions from various sources would make quantification overly speculative.
- In such situations, the CEQ recommends that agencies quantify what they can, explain what is not quantifiable, and qualitatively analyze unquantifiable GHG emissions.
 - ▶ This recognition provides agencies with some degree of flexibility in dealing with upstream and downstream emissions, but climate and environmental groups can heavily scrutinize agencies’ explanations of why they cannot foresee or quantify indirect emissions.

¹⁷⁶ *Patuxent Riverkeeper v. FERC*, No. 15-1127 (D.C. Circuit Jul. 15, 2016). CEQ’s recognition of agency discretion is consistent with a July 15, 2016 D.C. Circuit decision, in which the court deferred to the Federal Energy Regulatory Commission’s (FERC) decision not to apply the Social Cost of Carbon in NEPA analysis for a proposed liquefied natural gas (LNG) expansion project. FERC had acknowledged the SCC as a potential tool but declined to apply it based on certain of its limitations. Both the final guidance and the recent D.C. Circuit decision suggest that an agency would be wise to acknowledge and evaluate the Social Cost of Carbon as a potential tool, but that an agency’s reasoned evaluation of whether to use Social Cost of Carbon estimates is something that both the CEQ and the D.C. Circuit recognize as within the agency’s discretion.

In response to comments on the Trump-era NEPA revisions raising concerns that climate change would no longer be considered in NEPA analyses, the CEQ then stated that agencies will consider “predictable environmental trends” – including trends determined to be a consequence of climate change – in the baseline analysis of the affected environment, rather than as effects of the proposed action.¹⁷⁷ This was a deliberate attempt by the Trump administration’s CEQ to downplay the unavoidable cumulative impacts that fossil fuel based developers and producers have on the environment and human health. The October 2021 CEQ proposed rulemaking would do away with this regulation.

Accordingly, the 2020 CEQ Regulations did significantly more to reduce the obligation of federal agencies to consider GHG emissions and climate change in their NEPA reviews than the 2019 Draft GHG Guidance. Although the 2020 Regulations remain in effect, their longer-term influence over how agencies conduct NEPA reviews is in doubt, as noted below. In the meantime, considering the Notice, agencies are empowered to use the 2016 GHG Guidance at their discretion. Therefore, this guidance reflects the most detailed roadmap for addressing the impacts of GHG emissions and effects of climate change in NEPA review, until the CEQ takes further action during the Biden administration.

As directed by the January 20, 2021, EO and indicated in the notice, the CEQ is expected to review and update the 2016 GHG Guidance. The CEQ’s updated NEPA GHG emissions and climate change guidance very likely will incorporate parallel efforts by the Biden administration to update the SCC and develop other methodologies, including the Social Cost of Methane, to quantify impacts associated with GHG emissions, as required by the January 20, 2021 EO.

In updating the 2016 GHG Guidance, the CEQ may need to contend with the additional procedures put in place by the Trump administration in an eleventh-hour regulation finalized on January 8, 2021, as may be applicable.¹⁷⁸ This regulation was promulgated pursuant to EO 13891,¹⁷⁹ which has also been revoked by the Biden administration and made effective on the date of publication. It would require the CEQ to take certain procedural steps (e.g., Office of Information and Regulatory Affairs review, public comment) before issuing a “significant guidance document.” Not surprisingly, this regulation is on the White House’s list of actions that it will review in its two-phase NEPA regulations assessment and revision, and is consistent with the January 20, 2021 EO.

03.4 Federal Statute Authorities Pertaining to the DAPL

03.4.1 Mineral Leasing Act, Clean Water Act, and Rivers and Harbors Act

Section 28 of the Mineral Leasing Act (MLA) required ET/Dakota Access to obtain a right-of-way (ROW) easement from the Army Corps to build its pipeline underneath Lake Oahe

¹⁷⁷ 85 FR 43304 (July 16, 2020).

¹⁷⁸ 40 CFR. Part 1519. See: <https://www.law.cornell.edu/cfr/text/40/part-1519>. (Accessed on May 10, 2021); 86 FR 1279 (Jan. 8, 2021). Available at <https://www.govinfo.gov/content/pkg/FR-2021-01-08/pdf/2020-28881.pdf> - page=2. (Accessed on May 10, 2021).

¹⁷⁹ 84 FR 55235. Executive Order 13891. Promoting the Rule of Law Through Improved Agency Guidance Documents (Oct. 9, 2019). Available at: <https://www.govinfo.gov/content/pkg/FR-2019-10-15/pdf/2019-22623.pdf>. (Accessed on: May 11, 2021).

and across federally owned land on either side of the Lake Oahe crossing site.¹⁸⁰ Section 28 pertains specifically to pipeline purposes “for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined product produced.”¹⁸¹

Section 404 of the Clean Water Act (CWA) and Section 408 of the Rivers and Harbors Act (RHA) required DAPL to secure additional authorizations.^{182,183}

The Clean Water Act makes it unlawful to discharge dredged or fill material into navigable waters of the U.S. without a permit from the Army Corps.¹⁸⁴ Likewise, the Rivers and Harbors Act forbids certain construction activities impacting the “navigable water of the United States” without prior permission from the Army Corps. After evaluating a proposal under these statutes, the Army Corps may grant approval for specific elements of the project,¹⁸⁵ or if the activities alone or collectively will have a minimal impact on regulated waters, the Army Corps may grant approval under its general permitting authority.¹⁸⁶ The Army Corps relies on one such general permit, known as Nationwide Permit 12 (NWP 12), for “the construction, maintenance, repair, and removal” of pipelines where no more than one-half acre of federal waters will be disturbed at any crossing.¹⁸⁷

Activities under NWP 12 are subject to a number of General Conditions (GC) which sometimes require that the Dakota Access give and receive “pre-construction notification and verification” (PCN) before work can begin.¹⁸⁸ GC 20 requires a PCN for any activity that “may have the potential to cause effects to any historic properties . . . including previously unidentified pre-properties” of cultural or religious importance to a tribe.¹⁸⁹

GC 20 traces its origins to the National Historic Preservation Act (NHPA). Enacted in 1966, the NHPA is designed to foster conditions under which “our modern society and prehistoric and historic resources can exist in productive harmony.”¹⁹⁰ Section 106 of the Act requires the agency to consider the effect of its “undertakings” on any property of cultural or religious significance to Indian tribes.¹⁹¹ The term “undertakings” is broadly defined to include any “project, activity, or program” requiring a federal permit.¹⁹²

The NHPA is administered by the Advisory Council on Historic Preservation (ACHP), which is charged by the Act with development of the regulations for its implementation. Under both the ACHP’s regulations and those of the Army Corps, the Army Corps must, pursuant to Section 106, make a “reasonable and good faith effort” to identify the potential impacts of an undertaking on religious and cultural properties within its path. The agency must also “consult with any Indian tribe . . . that attaches religious and cultural significance to historic properties that may be affected by an undertaking”¹⁹³ and provide that tribe “a reasonable opportunity to

180 30 USC. §185, Section 185(w) directs agency heads to notify two congressional committees when it receives applications for rights-of-way for pipelines of 24 inches or more in diameter.

181 *Id.*

182 Pursuant to Section 404 of the Clean Water act, a permit (e.g., Nationwide 120 can be issued which regulates the “discharge of dredge and fill” materials to water. . . . All of the other 48 states, including Colorado, decided to leave the dredge and fill permit program to EPA and the Army Corps. Available at: <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404>

183 Section 14 of the Rivers and Harbors Act of 1899 codified 33 USC. §408 (Section 408) authorizes the Corps to grant permission to third parties to modify federal flood control and navigation projects, provided the modifications are not injurious to the public interest and will not impair the usefulness of the projects.

184 33 USC. §1311(a) (1995); *see also* 33 USC. §1342(a) (2014).

185 33 USC. §1344(a) (1987).

186 *Id.* §1344(e)(2); *see also* *Sierra Club v. U.S. Army Corps of Engineers*, 803 F.3d 31, 38-40 (2015).

187 Reissuance of Nationwide Permits, 77 Fed. Reg. 10,184, 10,271 (Feb. 12, 2012) [hereinafter NWP 12].

188 33 C.F.R. §§330.1(e)(2)-(3), 330.6(a)(3)(i) (2013).

189 NWP 12, at 12,284.

190 54 USC. §300101(1) (2014).

191 *Id.* §§306108, 302706(b).

192 *Id.* §300320.

193 *Id.* §800.2(c)(2)(ii)(A).

comment on the undertaking.¹⁹⁴ In the event of a disagreement between the Army Corps and a state or tribal historic preservation officer (SHPO or THPO) over the effects of an undertaking on those properties, Section 106 requires consultation with, and an opportunity for comment by ACHP.¹⁹⁵ The NHPA does not require the Army Corps to adopt any recommendation offered by the ACHP. Once opportunity for comment has been provided, the requirements of Section 106 are satisfied.¹⁹⁶

Issuance of these authorizations was the federal nexus that, in turn, triggered the environmental review provisions of NEPA. Because the Army Corps has jurisdiction over Lake Oahe and owns the land on either side of it, the federal statutes, including Section 408 of the Rivers and Harbors Act and Section 185 of the Mineral Leasing Act, required Dakota Access to obtain permission from the Army Corps to cross under Lake Oahe, including the federal land on each shore.

03.4.2 DAPL NEPA Compliance Thus Far

Figure 3-4, Figure 3-5, Figure 3-6, and Figure 3-7, respectively, depict the timeline of the major events in the DAPL NEPA process, beginning at project inception in June 2014 through Army Corps' expected completion date in September 2022. **Figure 3-4** includes major events in the NEPA process from 2014-2017; **Figure 3-5** includes the major NEPA events from 2017-2019; **Figure 3-6** includes the major NEPA events from 2019-2021; and **Figure 3-7** includes the major NEPA events from 2021 to the anticipated completion of the EIS in late 2022. Relevant court proceedings and actions taken by either ET/Dakota Access or the Army Corps are also included for context.

On October 21, 2014, Dakota Access submitted an application to the Army Corps for approval of over 200 river crossings (NWP 12), permission to lay pipe beneath seven locations used by the Army Corps for navigation and flood control under the Rivers and Harbors Act, and a real estate easement pursuant to Section 28 of the MLA to allow the pipe to traverse beneath Army Corps-owned floodplains. Specifically, Dakota Access needed Section 408 permission from the Army Corps to drill from one side of Lake Oahe to the other, crossing approximately 500 feet of Corps-owned lands on either shoreline of the Lake, and lay pipeline in that path under Lake Oahe, for which the Army Corps has federal management responsibility.

The "nexus" between the permits, permissions, and need for Section 106 NHPA compliance triggered the NEPA process (**See: Figure 3-1 in Section 3.1.2.1 and Figure 3-2 in Section 3.2.13**).¹⁹⁷ The proposed action would be to utilize a method of drilling – horizontal directional drilling (HDD) – which involves drilling holes on private land on each side of the lake and continuing the drilling below ground until it crosses beneath the lake itself. Dakota Access proposed that the pipeline would be placed 92 feet beneath the bed of Lake Oahe, unlike the shallow crossing made by the Northern Border Natural Gas Pipeline, a right-of-way (ROW) parallel and adjacent to the DAPL's proposed ROW (**Figure 3-8 and Figure 3-9, respectively**).

Dakota Access also needed to secure a Section 408 permission from the Army Corps in a second location in North Dakota across an overland "flowage easement" farther up the Missouri River at Lake Sakakawea. The Army Corps' process for granting the Section 404 permission and the ROW pursuant to the Mineral Leasing Act are part of a single regulatory act and proceeding

¹⁹⁴ 54 USC. §306108 (2014).

¹⁹⁵ 36 C.F.R. §800.4(d)(1)(iv) (2004)

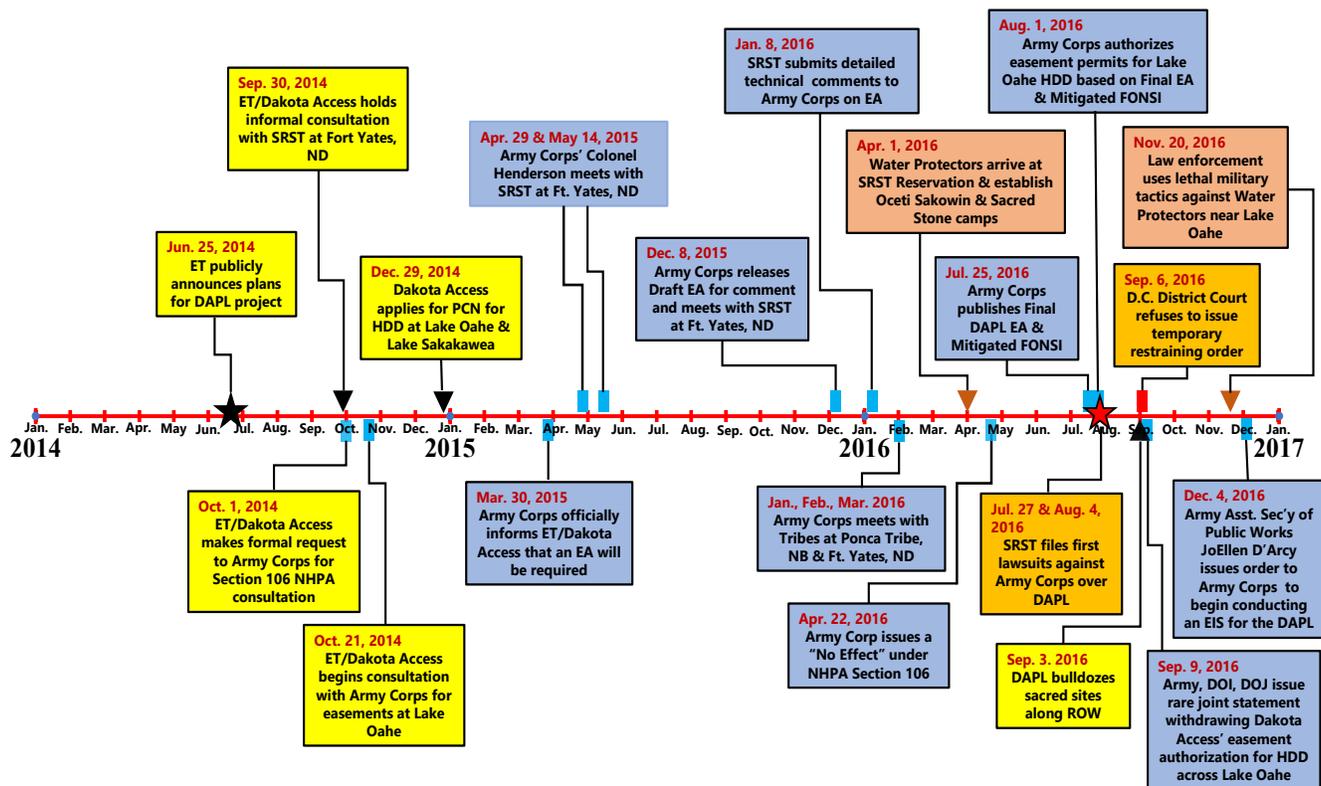
¹⁹⁶ *CTIA-Wireless Ass'n v. FCC*, 466 F.3d 105, 106-107 (2006).

¹⁹⁷ 40 CFR 1508.1

that culminated in a single decisional document, the DAPL Final EA and FONSI, that were published on July 25, 2016.¹⁹⁸

In November 2015, the Army Corps released its draft environmental assessment (“Draft EA”) that made no mention of the pipeline’s implications for the Tribes’ treaty rights, the unceded treaty lands, the waters that sustain the Tribes, or their subsistence hunting, fishing, and gathering rights.¹⁹⁹ The Draft EA’s maps failed to even identify the Standing Rock Sioux Reservation, literally erasing them from the analysis (**See Figure 3-3**). The Draft EA also revealed that DAPL had considered an alternative route north of Bismarck, ND (**Figure 3-10**), a mostly white and comparatively wealthy community, but abandoned that route because of the risks of an oil spill to downstream municipal water supplies, people, and the environment.²⁰⁰

The Tribes submitted multiple rounds of technical, legal, and cultural comments on the draft. So did other federal agencies, including the EPA, DOI, and ACHP, pointedly questioning the scope of the environmental and cultural review.^{201,202,203} The comments of those federal agencies pressed the case that the risks of the pipeline at this important location were sufficiently “significant” that an EIS was warranted. On July 25, 2016, the Army Corps approved two of the three authorizations needed to build the pipeline across Lake Oahe.²⁰⁴



» Figure 3-4. Timeline of major events in the DAPL NEPA process, 2014-2017.

198 Final EA and Mitigated FONSI. Available at: <https://www.nwo.usace.army.mil/Media/News-Releases/Article/878649/dakota-access-pipeline-final-ea-and-fonsi-released-for-nd-section-408-crossings/> and <https://usace.contentdm.oclc.org/digital/collection/p16021coll7/id/2801>.

199 *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, No. 16-1534, Initial Complaint. Document 1 (D. D.C. July 27, 2016).

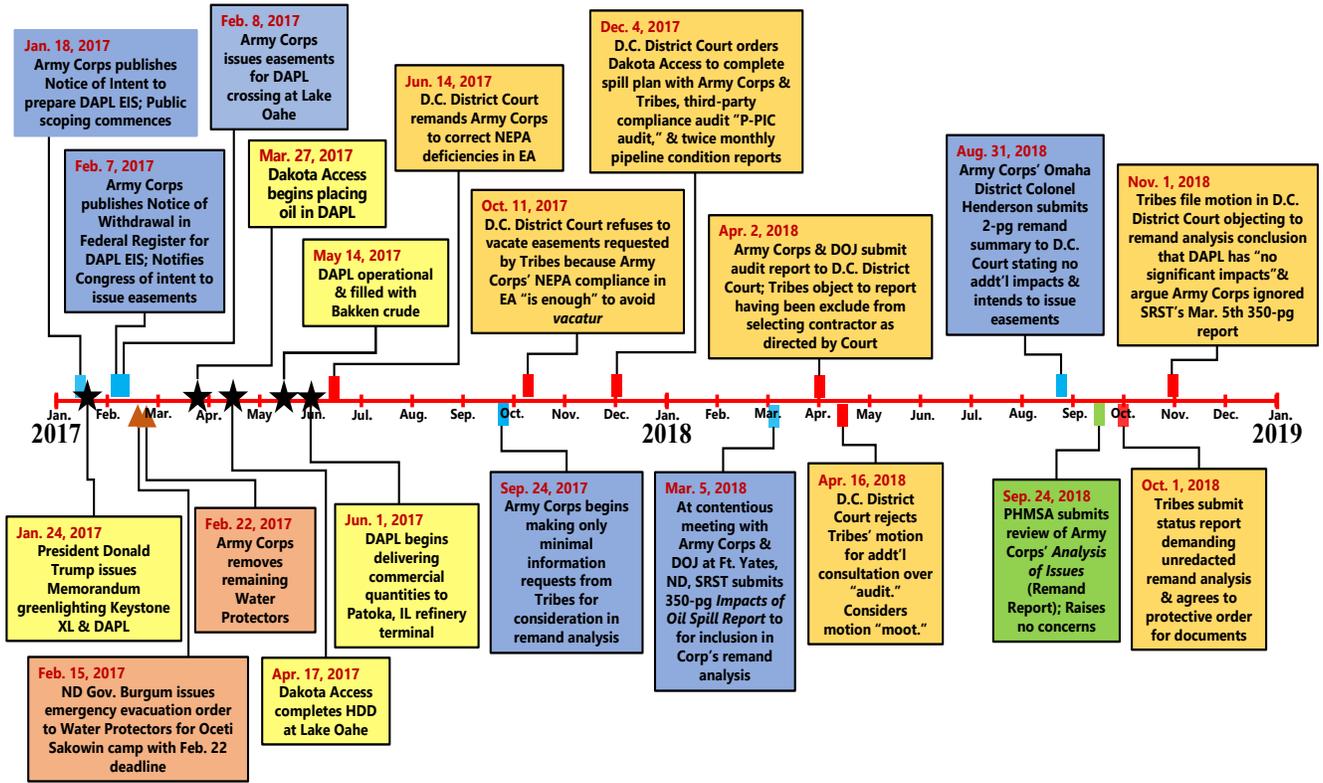
200 James Grijalva. 2017. Resistance, Resilience and Reconciliation: Indigenous Human Rights to Environmental Protection in a Fossil Fuel Frenzy. *The Jurist* (April 11). Available at: <https://www.jurist.org/commentary/2017/04/resistance-resilience-and-reconciliation-indigenous-human-rights-to-environmental-protection-in-a-frenzy/> (Accessed on: March 25, 2021).

201 Philip Strobel, EPA Director of NEPA Compliance and Review Program, Office of Ecosystems Protection and Remediation. Letter to Brent Cossette, U.S. Army Corps of Engineers Omaha District. Ref: 8EPR-N. (Jan. 8. 2016).

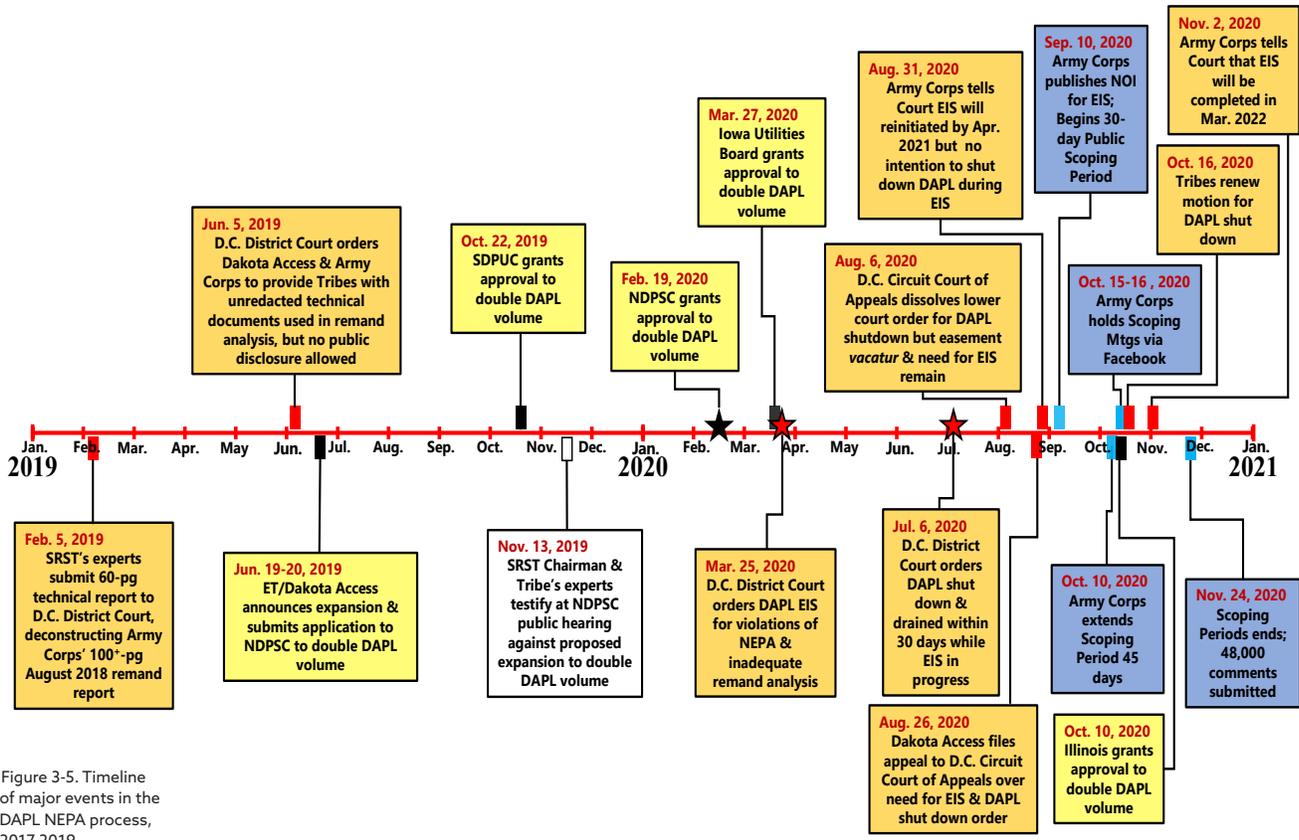
202 *Id.* (March 11, 2016).

203 John M. Fowler, Executive Director, Advisory Council on Historic Preservation (ACHP). Letter to Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works). (June 2, 2016). Available at: <https://turtletalk.files.wordpress.com/2016/01/achp-letter-6-2-16.pdf> (Accessed: June 27, 2021).

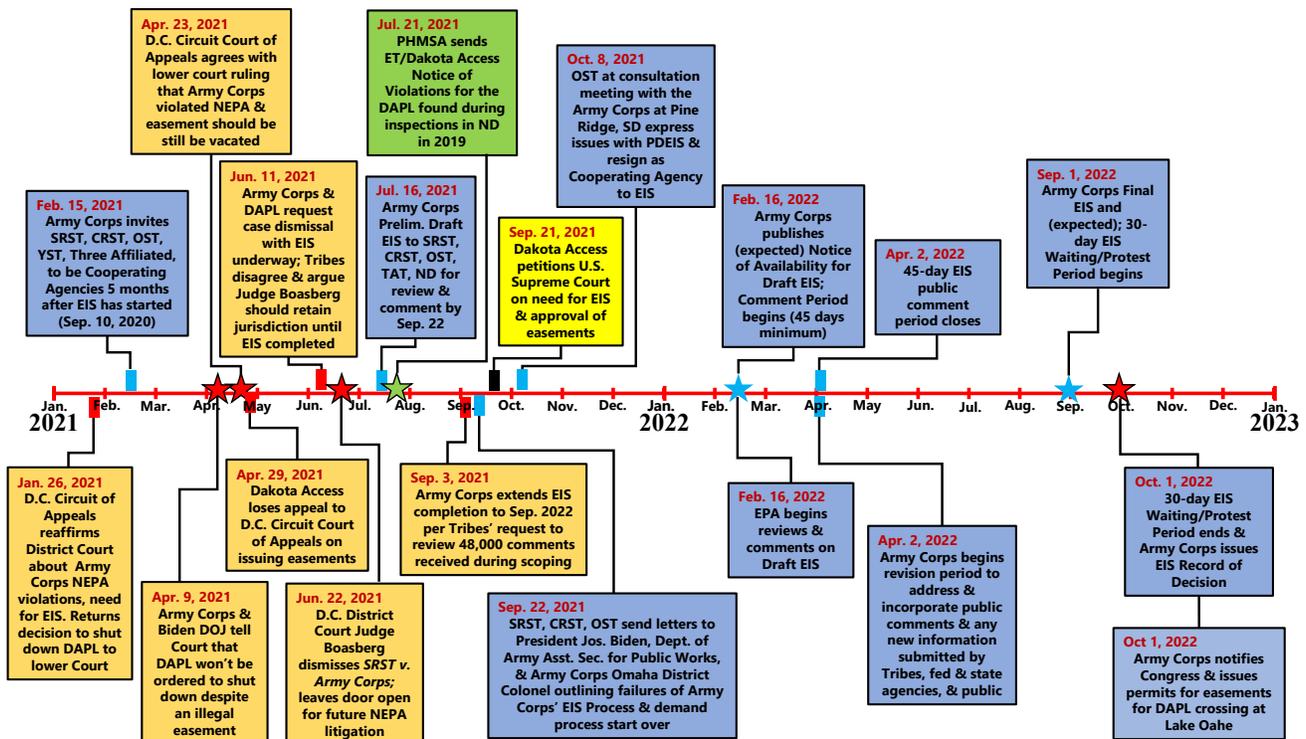
204 Lawrence S. Roberts, DOI Acting Assistant Secretary - Indian Affairs. Letter to Brent Cossette, Army Corps of Engineers (March 29, 2016). Available at: <https://usace.contentdm.oclc.org/digital/collection/p16021coll5/id/2707>. (Accessed on: June 26, 2021).



» Figure 3-4. Timeline of major events in the DAPL NEPA process, 2014-2017.



» Figure 3-5. Timeline of major events in the DAPL NEPA process, 2019-2021.



» Figure 3-6. Timeline of major events in the DAPL NEPA process, 2019-2021.

The Section 408 permission was supported by a FONSI and based on the EA, which was also published on July 25, 2016.

In September of 2016, however, the government shifted its position, with the DOJ, Army Corps, and DOI issuing an unusual joint statement, finding that the Tribes had raised "important issues" regarding the pipeline's permitting, and delaying issuance of the easement needed to cross Lake Oahe pending further review.²⁰⁵ As part of that review, the DOI Solicitor issued a binding legal opinion ("M-Opinion") on December 4, 2016, finding "ample legal justification to decline to issue the proposed Lake Oahe easement" and that ***these circumstances warrant a more searching consideration of the effects of a federal project on Tribal treaty rights.***²⁰⁶

The Solicitor also emphasized the need ***to develop an EIS to "adequately evaluate the existence of and potential impacts to tribal rights and interests," consider "a broader range of alternative pipeline routes," and undertake "a catastrophic spill analysis prepared by an independent expert."***²⁰⁷

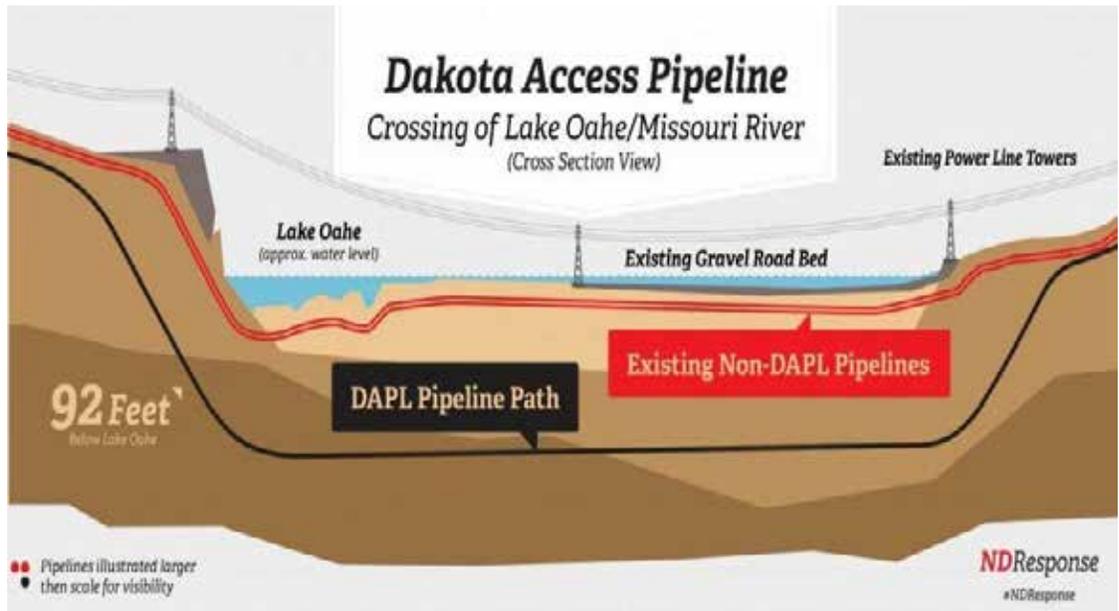
The Solicitor's Memo pointedly questioned how the Army Corps could have rejected the Bismarck alternative due to risks to water supplies, ***yet the threat to Tribal water was***

205 DOJ, DOI and Army Corps. Joint Statement from the Department of Justice, the Department of the Army and the Department of the Interior Regarding Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers. (Sept. 9, 2016). Available at: <https://www.justice.gov/opa/pr/joint-statement-department-justice-department-army-and-department-interior-regarding-standing-rock-sioux-tribe-v-u-s-army-corps-of-engineers> (Accessed on: May 5, 2021).

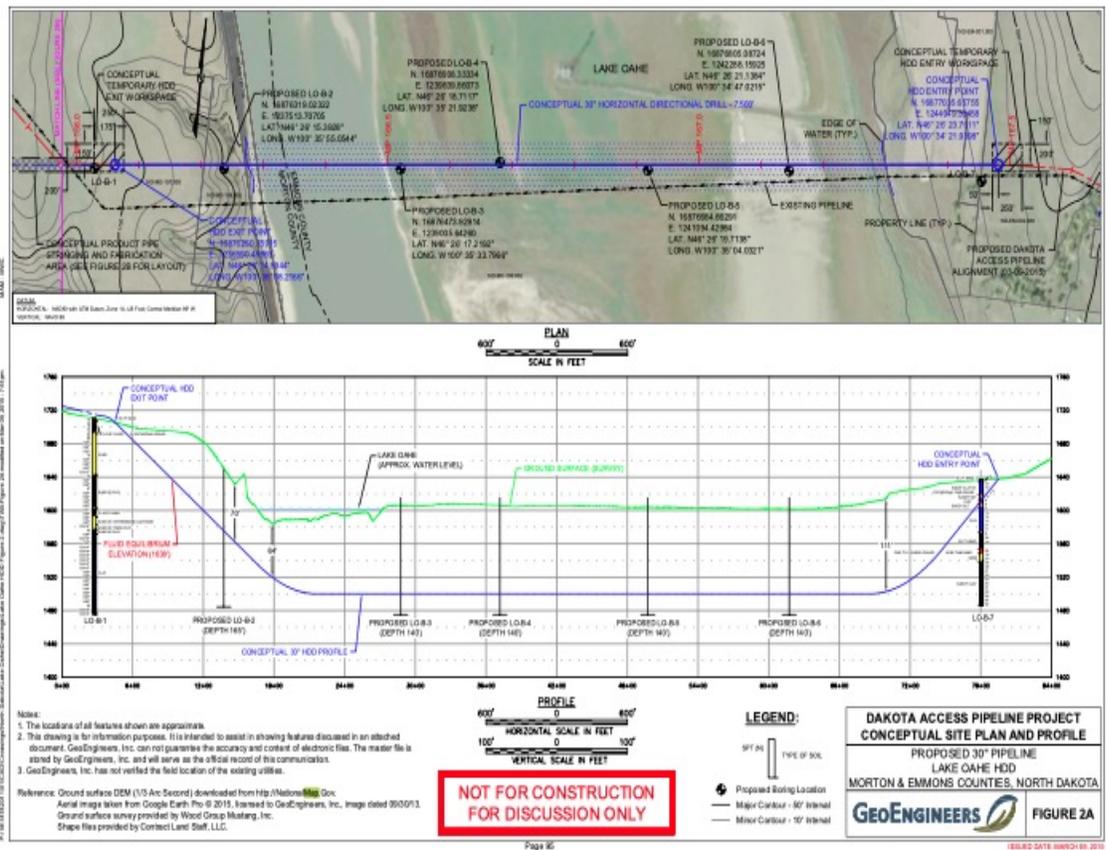
206 Hilary C. Tompkins DOI Solicitor General. Tribal Treaty and Environmental Statutory Implications of the Dakota Access Pipeline. Memorandum Opinion, M-37038 at 4. (December 4, 2016). Available at: https://www.eenews.net/assets/2017/02/21/document_ew_05.pdf. Also, *Standing Rock Sioux Tribe v. Army Corps of Engineers. Case 1:16-cv-01534-JEB Document 117-6* (Feb. 4, 2017).

207 *Id.*, at 26.

» Figure 3-8. Schematic of the DAPL horizontal directional drilling beneath Lake Oahe.



» Figure 3-9. Conceptual site plan for the DAPL's Lake Oahe HDD crossing from draft EA, 2015.



*considered mitigated by the same pipeline technology that the Army Corps found would not protect Bismarck residents.*²⁰⁸

Additionally, the Solicitor stated that *the Bismarck route was “summarily rejected with little justification, especially given the presence of similar facts and potential for higher*

²⁰⁸ *Id.*

risks associated with the Lake Oahe route.²⁰⁹ The Solicitor also **critiqued the Army Corps' spill model: "it does not correlate with the vast majority of actual releases," nor were the Tribes "afforded the opportunity to consider and independently analyze" the Army Corps' technical information.**²¹⁰

On December 4, 2016, after an extensive review and following the Solicitor's recommendations, the Assistant Secretary of Army for Civil Works declined to issue the MLA easement and directed the preparation of a comprehensive EIS to inform whether it was appropriate to grant one.²¹¹ The Army Corps initiated the EIS process issuing an NOI shortly thereafter, and announced that it would focus on the risks of an oil spill, impacts on the Tribes' Treaty rights to hunt and fish, and "route alternatives" to the Lake Oahe crossing site.²¹² Immediately upon assuming office, however, President Trump issued a "Presidential Memorandum" on January 24, 2017, about the pipeline that resulted in the cancellation of the EIS process, withdrawal of the Solicitor's opinion, and issuance of the Mineral Leasing Act easement.²¹³ On February 7, 2017, the Army Corps publishes in the Federal Register a Notice of Withdrawal of their intent to prepare an EIS for the DAPL.

In a legal victory for the Tribes, Judge Boasberg of the D.C. District Court issued a 91-page opinion on June 14, 2017, stating that the Army Corps' permits authorizing Lake Oahe crossing were, in part, a violation of NEPA because 1) A "Presidential Memorandum" hastily issued by the Trump administration just days after the inauguration violated NEPA when Army Corps did not adequately consider the controversy and disagreement among experts regarding spill risks; 2) did not examine effect of a spill on Tribal hunting & fishing rights; and 3) did not adequately assess environmental justice impacts. Judge Boasberg remands the Army Corps to address the NEPA deficiency issues by requiring that the Army Corps conduct additional environmental analysis on the three issues identified. The Army Corps is given a deadline of April 2018 to complete the remand analysis. The court granted the Army Corps an extension until August 31, 2018.

On August 31, 2018, the Army Corps (Omaha District Commander, Colonel John Hudson, PE) submits a two-page "memorandum of record" to the D.C. District Court summarizing the remand analysis (*Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe*) and affirming the Army Corps' DAPL Final EA & FONSI without submitting supporting technical analysis and "meaningful consultation" with the Tribes. Colonel Hudson's Memorandum states that the Army Corps doesn't need to revisit its 2016 approval of the now-operating DAPL & states his intention to issue permits for the Lake Oahe easement as provided under MLA.

On November 1, 2018, the SRST filed a motion objecting to the conclusions in the 100-page remand analysis following the Tribe's technical team's extensive analysis of the *Analysis of Issues*. The SRST technical team submitted a comprehensive analysis of the Army Corps' analysis to the court in February 2019.

Judge Boasberg issued a second opinion on March 25, 2020, chastising the Army Corps' for "not satisfactorily and fully" addressing in its remand analysis the impacts on the SRST and

²⁰⁹ *Id.* at 27.

²¹⁰ *Id.* at 28.

²¹¹ JoEllen Darcy, Assistant Secretary of the Army (Civil Works). Proposed Dakota Access Pipeline Crossing at Lake Oahe, North Dakota. Memorandum for Commander U.S. Army Corps of Engineers. (Dec. 4, 2016). Available at: <https://earthjustice.org/sites/default/files/files/stmt.pdf>. (Accessed on May 13, 2021).

²¹² 82 Fed. Reg. 5543 (Jan. 18, 2017)

²¹³ President Donald J. Trump. Memorandum on Construction of the Dakota Access Pipeline (Jan. 24, 2017). Available at: <https://www.govinfo.gov/content/pkg/DCPD-201700067/pdf/DCPD-201700067.pdf>. (Accessed on: April 26, 2021).

other Tribes. For the first time in the court proceedings, Judge Boasberg notes that “too many questions remain unanswered” regarding the potential impacts of oil spills and the likelihood that one could take place requires an EIS. Also, significantly, Judge Boasberg allows the DAPL to keep operating during the EIS process because “it has been in operation for nearly three years” without incident.”

The Army Corps published their NOI for the current EIS on September 9, 2020 and commenced a 45-public scoping period. The scoping period was extended by the Army Corps to November 24, 2020, as per the request of the Tribes. The Army Corps also stated their intention to complete publish the Final EIS in March 2022.

On January 26, 2021, the Circuit Court of Appeals of the D.C. District rejected the separate Army Corps and Dakota Access appeals of the D.C. District Court’s decision to conduct the EIS. On February 15, 2021, the Army Corps invited the Standing Rock Sioux, Cheyenne River Sioux, Oglala Sioux, Rosebud Sioux, Yankton Sioux, and the Three-Affiliated Tribes to become Cooperating Agencies in the EIS. A similar invitation was extended to the State of North Dakota. The Rosebud and Yankton Sioux Tribes declined to participate.

“Consultation” and cooperating agency meetings were conducted by the Army Corps with individual Tribes from April to October.

On July 16, 2021, the Army Corps released the Preliminary Draft EIS (PDEIS) to the Tribes with Cooperating Agency status and to the State of North Dakota, setting a deadline for September 22, 2021, for the Cooperating Agencies to submit comments on the PDEIS. The Army Corps also announced in early September 2021 that they had received approval to extend the completion of the Final EIS and release of the Record of Decision (ROD) to September 2022.

Dissatisfied with the content and impact analysis in the PDEIS, the Standing Rock and Cheyenne Sioux Tribal Chairs and the Oglala Sioux Tribe’s President sent joint and separate letters on September 22, 2021 to the Army Corps.²¹⁴

Rather than provide specific and detailed comments on the PDEIS as the Army Corps had expected, the Tribes’ leadership focused on the Army Corps’ NEPA procedural shortcomings. In particular, the Tribes focused on the Army Corps’ continual refusal to provide the Tribes and their experts with substantive data and information on route selection analysis and spill modeling, including details on the assumptions and methodology used to calculate an underestimated worst-case discharge (WCD; See: Section 5.2.3.3, Overview of Worst-Case Discharge, Spill Risk, and Spill Response; and Appendix B).

The Tribes noted the abject failure of the PDEIS. Specifically, the Tribes chastised the Army Corps for the agency’s failure to consider the Tribes’ experts’ detailed technical critiques. Those critiques honed in on the Army Corps’ acceptance of the weak impact analyses conducted and the subsequently poorly-reasoned conclusions reached by the third-party consultant, ERM, that favored the DAPL’s current route and continued operation as the Army Corps’ preferred alternative.

214 Letter to Colonel Mark Himes, Commander and District Engineer, Army Corps of Engineers from Mike Faith, Chairman, Standing Rock Sioux Tribe (Sept. 22, 2021). Available at: <https://earthjustice.org/sites/default/files/files/srst-ca-comment-2021-07-deis.pdf> (Accessed on: Sept. 22, 2021); Letter to Jaime Pinkham, Assistant Secretary of the Army for Public Works from Mike Faith, Chairman, Standing Rock Sioux Tribe; Kevin Killer, President, Oglala Sioux Tribe; and Harold Frazier, Chairman, Cheyenne River Sioux Tribe (Sept. 22 2021). Available at: https://earthjustice.org/sites/default/files/files/92221.threetribeslettertocorps.dapl_eis_final.pdf (Accessed on: Sept. 22, 2021); D.K. Kumar. Tribes say Dakota Access oil pipeline’s environmental review is biased. Reuters. (Sept. 22, 2021). Available at: <https://www.reuters.com/world/us/tribes-say-dakota-access-oil-pipeline-environmental-review-is-biased-2021-09-22/> (Accessed on: September 22, 2021); Tribes want Corps consultant drafting Dakota Access Pipeline EIS fired as biased. ENR Report. (Oct. 19, 2021). Available at: <https://www.enr.com/articles/52752-tribes-want-corps-consultant-drafting-dakota-access-pipeline-eis-fired-as-biased> (Accessed on: Oct. 20, 2021); Oglala Sioux Tribe Special Tribal Council Session with Army Corps of Engineers (Oct. 8, 2021). Available at: <https://www.facebook.com/THEOGLALANATION/videos/482240193489923/> (Accessed on: Oct. 12, 2021).

The PDEIS relied exclusively on the:

1. Data and information provided exclusively by ET/Dakota Access to the Army Corps and third-party NEPA contractor while keeping it secretive to the Tribes and their experts.
2. Faulty analyses in the Final EA and Mitigated FONSI from July 2016.
3. Faulty analyses from the D.C. District Court order remanding the Army Corps to correct its “significant” NEPA deficiencies stemming from their 2016 Final EA.

In particular, the Tribes’ leadership pointed out the many failures of the Army Corps’ PDEIS to adequately analyze the spill risks and higher level of impact that can be expected when doubling the capacity of the DAPL from 575,000 bpd to 1.1 million bpd. The Tribes rightfully demanded that the Army Corps must address the risks and potential significant impacts against the backdrop of the abysmal safety record of ET/Dakota Access/Sunoco, including their violations recently cited by PHMSA (See: Section 5.2.3, [Spill Risk, Safety, and Emergency Response Issues](#)). In their September 22, 2021 letter to Jaime Pinkham (enrolled Coeur d’Alene Tribal Member), Acting Assistant Secretary of the Army for Public Works, the Tribes’ leadership stated that the Army Corps had also demonstratively failed to follow the Circuit Court of Appeals of the D.C. District and the D.C. District Court’s direction to address the Tribes’ concerns, while also failing to follow NEPA law and procedure to fully engage the Tribes.

Tribal leadership demanded the Assistant Secretary order the current NEPA EIS process be abandoned and a new one initiated, requiring full transparency to address the Tribe’s data and information requests. Their demand also included the removal of the Army Corps’ third-party contractor, ERM, given their numerous conflicts of interest (See: Section 3.2.14, [Agency Responsibility for NEPA Documents](#)).

The Oglala Sioux Tribe took it one step further by passing a resolution in September 2022 withdrawing from the DAPL EIS as a Cooperating Agency.

04. **Standing Rock Sioux Tribe v. Army Corps of Engineers**

Section 4 provides a narrative overview of the litigation in the DAPL case, *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*. The narrative is broken out year-by-year.

Appendix A presents in table-form a comprehensive timeline of all key dates and events that have occurred throughout the life of the DAPL project from project proposal (2014) through the latest D.C. District Court proceedings that concluded in the dismissal of *Standing Rock Sioux Tribe v. United States Army Corps of Engineers* (June 22, 2021).

04.1 Current Status

The DAPL construction, including the crossing at Lake Oahe, was completed in June 2017 and the pipeline became fully operational in July 2019. In 2020, Dakota Access announced plans to double the throughput capacity of the DAPL from 570,000 bpd to 1.1 million bpd.

Following the receipt of the status reports filed by the Tribes,²¹⁵ Army Corps,²¹⁶ and Dakota Access²¹⁷ on June 11, 2021, presiding D.C. District Court Judge Boasberg dismissed *Standing Rock Sioux Tribe v. United States Army Corps of Engineers*.²¹⁸ While the court's order for dismissal ended the four-year-long case, the lawsuit can be reopened if there's a violation of the court's prior orders in the case.²¹⁹ The Tribes have options to pursue litigation in the future following the publication of the Final EIS.²²⁰ Specifically, the dismissal order states that:

1. Considering the Army Corps' monthly public updates and Plaintiffs' [Tribes] cooperating agency arrangements, the Court will not require independent updates or status reports.
2. All remaining outstanding counts are DISMISSED WITHOUT PREJUDICE,²²¹ given Plaintiffs' [Tribes'] lack of objection.
3. The Clerk shall TERMINATE this matter, but Plaintiffs [Tribes] may move to have it reopened in the event, for example, of a violation of the Court's prior Orders.
4. Plaintiffs [Tribes] shall file a separate action [lawsuit] if they wish to challenge the forthcoming EIS, which action they may mark as related to this one so that it will be assigned to this Court.

04.2 Case History

04.2.1 2016

July 26, 2016. The Army Corps approves the federal easements (including across Lake Oahe) for the Dakota Access Pipeline, after determining the project will have no significant impact on the environment.²²² The Army Corps bases this decision on a truncated environmental review.

²¹⁵ *Standing Rock*. Document 609 (D.D.C. June 11, 2021).

²¹⁶ *Id.* Document 610 (D.D.C. June 11, 2021).

²¹⁷ *Id.* Document 611 (D.D.C. June 11, 2021).

²¹⁸ *Id.* Minute Order and Order (D.D.C. June 22, 2021).

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ In legal terms, a case dismissed *without prejudice* means it's not dismissed forever, and whether the case can be opened again is subject to the conditions placed on it by the court. In this case, any violations of previous rulings in the case by DAPL or the Army Corps (e.g., spill or leak).

²²² U.S. Army Corps of Engineers. Final EA and Mitigated FONSI, Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands, at 6. (July 25, 2016).

July 27, 2016. The Standing Rock Sioux Tribe files its complaint (suit) against the Army Corps of Engineers in the U.S. District Court for the District of Columbia seeking an emergency stop [injunction] to all construction.²²³ The case is assigned to U.S. District Judge James E. Boasberg.

August 4, 2016. The Tribe asks the Court for a preliminary injunction since the pipeline is already under construction and would be finished before the case could be formally decided.

August 19, 2016. The Cheyenne River Sioux Tribe's motion to intervene is granted.²²⁴ The Oglala and Yankton Sioux Tribes filed their own lawsuits, which were later consolidated.²²⁵

September 4, 2016. The Tribes file an emergency motion for a temporary restraining order (TRO) to block the construction until a decision is reached on the injunction motion. The TRO was filed the day after DAPL bulldozed an area of the pipeline corridor filled with Tribal sacred sites and burials that had been identified to the court just the previous day.²²⁶ Water protectors trying to prevent the destruction of the sacred site were pepper sprayed and attacked by guard dogs.

September 6, 2016. Judge Boasberg holds a hearing on the emergency motion for the TRO. The Judge issues a TRO for the pipeline corridor nearest the Missouri River but declines to halt construction on the portion of the pipeline route that had recently been identified as sacred tribal burial ground.²²⁷ Boasberg states he is issuing the order as an "administrative injunction ... to give the court sufficient opportunity to consider the emergency motion for injunction pending appeal." The court directed "that Dakota Access LLC be enjoined pending further order of the court from construction of the Dakota Access Pipeline for 20 miles on both sides of the Missouri River at Lake Oahe."

September 9, 2016. While acknowledging the long history of the federal government's dispossession of Indian people,²²⁸ D.C. District Court Judge Boasberg denied the Tribe's two motions for a preliminary injunction seeking to block construction of the pipeline on grounds that the Army Corps: (1) Failed to conduct "meaningful" government-to-government consultation with the Tribes as required under Section 106 of the NHPA; and (2) that the project had resulted in "irreparable harm" to the Tribes.²²⁹ Boasberg notes that the Army Corps is not obligated to conduct an environmental review of the entire pipeline because most of it is constructed on private land. The Tribes immediately challenged the easement filing an appeal to the D.C. Circuit Court of Appeals.²³⁰ Later that day, the DOJ, DOI, and Army Corps issue a rare joint statement announcing that the federal agencies will halt any additional permitting and reconsider its past permits of the project near Lake Oahe pending further environmental assessments are conducted.²³¹ The statement says that while it appreciates the court's review, the government believes that the Tribe has raised some important issues

223 *Standing Rock v. Army Corps of Engineers* Case 1:16-cv-01534-JEB Document 1 (July 27, 2016).

224 *Id.* Document 19 (D.D.C. Aug. 16, 2016).

225 *Yankton Sioux Tribe v. U.S. Army Corps of Engineers*. Case 1:16-cv-01796-JEB Document 1 (Sept. 8, 2016). and *Oglala Sioux Tribe v. U.S. Army Corps of Engineers*. Case 1:17-cv-00267-JEB Document 1 (Feb. 11, 2017) and

226 *Standing Rock*. Document No.29-1 Declaration of Tim Mentz (D.D.C. Sept. 2, 2021).

227 MINUTE ORDER: "As explained at today's hearing, the Court ORDERS that Plaintiffs' [30, 31] Motions for Temporary Restraining Order are GRANTED IN PART and DENIED IN PART. As agreed by Defendants, the Court ORDERS that no construction activity on the DAPL may take place between Highway 1806 and 20 miles to the east of Lake Oahe. Construction activity to the west of Highway 1806 may proceed." (D.D.C. September 6, 2016).

228 *Cobell v. Norton*, 240 F.3d 1081, 1086 (D.C. Cir. 2001).

229 *Standing Rock*. Document 39 (Sept. 9, 2016).

230 *Id.* Document 42 (D.D.C. Sept. 9, 2016).

231 DOJ, DOI and Army Corps. Joint Statement from the Department of Justice, the Department of the Army and the Department of the Interior Regarding Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers. (Sept. 9, 2016). Available at: <https://www.justice.gov/opa/pr/joint-statement-department-justice-department-army-and-department-interior-regarding-standing> Accessed on: May 5, 2021.

worthy of additional consideration. The statement also called for a national review of the government's approach to Tribal consultation for major fossil fuel projects.

October 9, 2016. D.C. Circuit Court of Appeals court denies the tribe's appeal of the September 9, 2016 ruling.²³² However, the court emphasizes that it hoped that the "spirit of Section 106 [of the National Historic Preservation Act] may yet prevail" as the court did not have the last word, and decisions still need to be made at the permit crossing at Lake Oahe. Both the appeal and the district court litigation proceed, but the injunction covering work in the pipeline corridor ceased.

November 14, 2016. DOI and Army Corps announce they will delay a final decision on issuing the Lake Oahe easement for DAPL until further consultation with the Tribes.²³³ In a separate letter, the then Department of the Army's Assistant Secretary for Public Works, Jo-Ellen Darcy, stated the Army's concern regarding the risk of a spill or rupture that would "hasten [the need for better] detection and response, or otherwise enhance the protection of Lake Oahe, the Tribe's water supplies, and its treaty rights."²³⁴

December 4, 2016. Army headquarters intervenes and directs the Army Corps to deny Section 408 (RHA) and Section 28 (MLA) easement permissions for the Lake Oahe crossing, pending further review, and effectively halting work on the pipeline.²³⁵ Army headquarters raises concerns again about the impact of spills or leaks on the SRST and the need to perform more robust impact analysis, consider rerouting the pipeline, further evaluate the "extent and location of treaty rights."²³⁶ On the same day, the DOI Solicitor issues a lengthy and detailed "M-Opinion" regarding trust responsibility and raising the same concerns issued by the Army.²³⁷

December 5, 2016. DAPL files a motion for summary judgment requesting that court issue a declaration that Army Corps had properly issued a right of way under Section 28 (MLA) and that the "right-of-way is subject to the "Conditions of Easement (Lake Oahe)" set forth in the July 25, 2016 EA and Mitigated Findings of No Significant Impact."²³⁸

04.2.2 2017

January 6, 2017. SRST files a motion asking D.C. District Court Judge Boasberg to throw out Dakota Access' lawsuit against the Army Corps.²³⁹ The DOJ, which represents the Army Corps, files a similar motion.²⁴⁰ The motions do not affect the lawsuit filed by SRST against the Army Corps permits, which were being held in abeyance pending the recently initiated EIS process that was considering various route alternatives.

232 *Standing Rock*. Case #16-5259 Document #1640062 (D.C.Cir. Oct. 11, 2016).

233 DOI and Army Corps. Statement Concerning the Dakota Access Pipeline (Nov. 14, 2016). Available at: https://www.army.mil/article/178278/statement_regarding_the_dakota_access_pipeline. Accessed: April 23, 2021.

234 Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), Letter to SRST Chairman Dave Archambault II, ETP CEO Kelcy Warren, and Dakota Access LLC EVP Joey Mahmoud. Available at: (<https://earthjustice.org/sites/default/files/files/stmt.pdf>). (Accessed on May 13, 2021). [https://www.usace.army.mil/Portals/2/Archambault_Chairman_Standing_Rock_Sioux_Tribe_Response_regarding_the_proposed_crossing_of_the_Dakota_Access_Pipeline%20-%2014%20Nov%2016%20\(002\).pdf?ver=StqBSiu3qf---GjgGafyzw%3d%3d](https://www.usace.army.mil/Portals/2/Archambault_Chairman_Standing_Rock_Sioux_Tribe_Response_regarding_the_proposed_crossing_of_the_Dakota_Access_Pipeline%20-%2014%20Nov%2016%20(002).pdf?ver=StqBSiu3qf---GjgGafyzw%3d%3d). Accessed on: May 13, 2021.

235 JoEllen Darcy, Assistant Secretary of the Army (Civil Works). Proposed Dakota Access Pipeline Crossing at Lake Oahe, North Dakota. Memorandum for Commander U.S. Army Corps of Engineers. (Dec. 4, 2016). Available at: <https://earthjustice.org/sites/default/files/files/stmt.pdf>. Accessed on May 13, 2021.

236 *Id.*

237 Hilary C. Tompkins DOI Solicitor General. Tribal Treaty and Environmental Statutory Implications of the Dakota Access Pipeline. Memorandum Opinion, M-37038 at 4. (December 4, 2016). Available at: https://www.eenews.net/assets/2017/02/21/document_ew_05.pdf. Also, *Standing Rock Sioux Tribe v. Army Corps of Engineers*. Case 1:16-cv-01534-JEB Document 117-6 (Feb. 4, 2017).

238 *Standing Rock*. Document 66-1. (D.D.C. Dec. 5, 2016).

239 *Standing Rock*. Document 66-1. (D.D.C. Dec. 5, 2016).

240 *Standing Rock*. Document 73-1 (D.D.C. Jan. 6, 2017).

After initially supporting the Army Corps against the Tribe's earlier litigation about the pipeline, Dakota Access shifted its position to sue the Army Corps in November of 2016, arguing that it had all the permissions it required to complete the pipeline across Lake Oahe. The lawsuit came as a surprise as the company had previously acknowledged that it still required a real estate easement — that has not yet been granted — before finalizing construction. The lawsuit came after the Army Corps announced on December 4, 2016, that it would prepare an EIS considering both the Tribe's treaty rights and route alternatives to the Lake Oahe crossing.

In its motion to the court asking it to dismiss the company's lawsuit, SRST explained how the Army Corps has not, and could not have, issued the easement yet. It also explained how the Army Corps' decision to provide a full EIS on route alternatives for the pipeline was legally required and appropriate considering the history of the Sioux.

January 18, 2017. The Army Corps issues an NOI in the Federal Register announcing the start of the EIS process for the DAPL project.²⁴¹ The NOI initiates a 45-day public scoping period soliciting public comment on the EIS to identify potential issues, concerns, and reasonable alternatives that should be considered in an EIS.

January 24, 2017. President Trump issues a Presidential Memorandum, directing the Army Corps to "review and approve in an expedited manner" the DAPL easement.²⁴²

February 7, 2017. The Army Corps rescinds the January 18, 2017 notice of its intention to conduct a full environmental review; on Feb. 8, 2017, it approves the easement.

February 14, 2017. The Tribes move for summary judgment (a ruling without trial) in the U.S. District Court for the District of Columbia to vacate the Trump Administration decision. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

March 7, 2017. The U.S. District Court for the District of Columbia refuses to delay operation of the pipeline.

June 14, 2017. The U.S. District Court for the District of Columbia partially grants a motion for summary judgment, pointing out flaws in the Army Corps' decision-making process and remanding for further review due to "significant" NEPA deficiencies. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

August 22, 2017. Energy Transfer Partners, the pipeline developer, sues Greenpeace, Earth First and BankTrack for their roles in protesting the pipeline, requesting \$1 billion in damages for alleged property damage and fraud.

October 11, 2017. The U.S. District Court for the District of Columbia refuses to halt ongoing operation of the pipeline. The court warns its determination does not "excuse Defendants from giving serious consideration to the errors identified in this court's prior opinion. Compliance with NEPA cannot be reduced to a bureaucratic formality, and the Court expects the Corps not to treat remand as an exercise in filling out the proper paperwork *post hoc*." *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

241 82 FR 5543. Notice of Intent to Prepare an Environmental Impact Statement in Connection With Dakota Access, LLC's Request for an Easement To Cross Lake Oahe, North Dakota (Jan. 18, 2017). Available at: <https://www.govinfo.gov/content/pkg/FR-2017-01-18/pdf/2017-00937.pdf>

242 President Donald J. Trump. Memorandum on Construction of the Dakota Access Pipeline (Jan. 24, 2017). Available at: <https://www.govinfo.gov/content/pkg/DCPD-201700067/pdf/DCPD-201700067.pdf>. (Accessed on: April 26, 2021).

October 19, 2017. The [Standing Rock Sioux and Cheyenne River Sioux Tribes ask the U.S. District Court for the District of Columbia to impose additional environmental oversight of the pipeline's operations while the environmental review is pending.](#) *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

December 4, 2017. [The court grants the Tribes' request,](#) and orders the Army Corps to work with Energy Transfer Partners and the Standing Rock and Cheyenne River Sioux Tribes to develop an oil spill plan, to undergo a third-party audit in which the Tribes help select the auditor, and to submit bimonthly activity reports to the court until the Army Corps completes its environmental review. [The court cites a recent Keystone Pipeline spill](#) as one factor in the decision, saying it illustrated the "inherent risk with any pipeline". The spill response plan is submitted to the court in early April. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

04.2.3 2018

April 17, 2018. The U.S. District Court for the District of Columbia denies a motion by the Tribes asking the court to require closer consultation between the parties, leaving open the possibility that the Tribes could raise challenges regarding the process for developing the plan at a later stage in the legal process. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

August 31, 2018. The Army Corps [concludes its court-ordered NEPA analysis](#) and finds that it doesn't need to revisit its 2016 approval of the now-operating project. **Throughout the recent court proceedings, the fact that the DAPL has been operating without major incident is irrelevant. Dakota Access and the Army Corps have not yet produced the results requested for their hydrostatic pressure testing to determine whether any leaks or weaknesses exist along the pipeline route and underneath Lake Oahe.**

04.2.4 2019

February 21, 2019. Energy Transfer [files a lawsuit](#) against Greenpeace in North Dakota state court, alleging that Greenpeace and activists conspired to use illegal and violent means to disrupt construction and damage the company. The lawsuit seeks millions of dollars in damages. The claims in this filing are similar to the claims in the company's previous suit against Greenpeace in federal court, which was [dismissed](#) by the U.S. District Court for the District of North Dakota on Feb. 14, 2019.

February 28, 2019. The Standing Rock Sioux Tribe [says](#) that the Army Corps failed to comply with a federal judge's order to consider the effect that the pipeline might have on local Tribes. Standing Rock Chairman Mike Faith refers to an Army Corps document, which states that their analysis "identified no new information" on the pipeline's impact on the Tribes. This memo, dated February 4, 2018, was produced three months before the Army Corps ever met with the Tribes. Chairman Faith argues that the Army Corps came to a premature conclusion, [calling it](#) "...a rigged process intended to justify a dangerous and illegal pipeline."

July 29, 2019. The Standing Rock Sioux Tribe [formally requests](#) a hearing in front of the North Dakota Public Service Commission (PSC) on the proposed plan to double the DAPL's capacity. Energy Transfer announced in June 2019 that it plans to expand the pipeline's

capacity from more than 500,000 bpd to 1.1 million bpd. The three-member North Dakota PSC previously agreed to consider holding a hearing on the proposal if one were formally requested. In his request, Tribal Chairman Mike Faith said the proposed capacity increase would increase the “consequences as well as the likelihood” of an oil spill. The hearing is scheduled for Nov. 13, 2019.

August 16, 2019. The Standing Rock Sioux Tribe files a motion for summary judgment in the U.S. District Court for the District of Columbia alleging that the Army Corps failed to meaningfully respond to the tribe’s concerns throughout the remand process in violation of NEPA and the National Historic Preservation Act. To correct this alleged wrong, the tribe requests that the court vacate an easement that was granted to allow pipeline construction. Such an order would effectively halt pipeline operations until a full environmental review can be conducted. This filing marks a new wave in the court battle following the June 2017 remand to the Army Corps to revisit its NEPA process. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

October 9, 2019. The Army Corps files a cross motion for summary judgment against the Tribes, claiming that “...the Army Corps undertook a comprehensive analysis of the three limited items remanded for additional consideration” and asking the court to reaffirm its dismissal of Standing Rock’s claims. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

04.2.5 2020

January 31, 2020. Oral arguments are scheduled on the motions for summary judgment in the D.C. District Court for March 18, 2020, at 11:00 am ET. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

March 25, 2020. The U.S. District Court for the District of Columbia rules that the Army Corps’ NEPA analysis did not fully address how the pipeline affects the Standing Rock Sioux Tribe and others near its route. Judge James E. Boasberg writes that “too many questions remain unanswered” about the pipeline’s impacts. The court orders the agency to conduct a full EIS. Up to this point, only an environmental assessment and a supplement, mandated by the court, have been completed. The pipeline has been in operation nearly three years and is allowed to continue operating while the EIS is prepared. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.). **Again, as has been the case throughout the most recent court proceedings, the fact that the DAPL continues to operate without major incident is irrelevant. Dakota Access and the Army Corps still have not yet produced the results requested for technical information on route selection, spill modeling, details of their spill response plan, leak detection equipment, and weld and pipe integrity inspections. This information would provide the Tribes with the necessary insight for planning as well as a method to better ascertain whether any leaks or weaknesses exist along the pipeline route and underneath Lake Oahe.**

July 6, 2020. Judge Boasberg vacates the Army Corps’ decision to grant an easement for the pipeline and orders that the DAPL be shut down within 30 days. The pipeline will be drained of oil and shut down until the Army Corps completes a full EIS. “[G]iven the seriousness of the Army Corps’ NEPA error, the impossibility of a simple fix, the fact that Dakota Access did

assume much of its economic risk knowingly, and the potential harm each day the pipeline operates, the court is forced to conclude that the flow of oil must cease." *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

July 9, 2020. Judge Boasberg declines to stay his July 6 order, meaning the DAPL still needs to be shut down by August 5, 2020. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.). The same day, ET files an appeal in the D.C. Circuit Court of Appeals.

July 10, 2020. ET files an emergency motion for a stay of the July 6 order at the D.C. Circuit Court of Appeals pending their appeal. *Standing Rock Sioux Tribe v. Army Corps*, No. 20-5197 (D.C. Cir.).

July 13, 2020. The Army Corps files both an appeal of the July 6 order and an emergency motion for a stay in the D.C. Circuit Court of Appeals. *Standing Rock Sioux Tribe v. Army Corps*, No. 20-5197 (D.C. Cir.).

July 14, 2020. The D.C. Circuit grants an administrative stay of the District Court's July 6 order, allowing the pipeline to continue operating while the court considers whether to grant the emergency motions for stay. *Standing Rock Sioux Tribe v. Army Corps*, No. 20-5197 (D.C. Cir.).

August 5, 2020. The D.C. Circuit Court of Appeals issues an order, dissolving the administrative stay, but further staying the District Court's injunction. The court ordered the Army Corps to clarify whether they intend to allow the pipeline to operate despite vacating its easement. *Standing Rock Sioux Tribe v. Army Corps*, No. 20-5197 (D.C. Cir.).

August 31, 2020. The Army Corps updates the D.C. District Court about the EIS process. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

September 8, 2020. The Standing Rock Sioux Tribe, Cheyenne River Sioux Tribe, Oglala Sioux Tribe, and Yankton Sioux Tribe request an injunction on continued pipeline operations pending completion of the NEPA process. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

September 10, 2020. The Army Corps files a Notice of Intent to prepare an Environmental Impact Statement regarding the granting of an easement to Dakota Access to cross federal land at Lake Oahe. Comments were to be received by **Nov. 26** (following an extension of the original October deadline).

October 16, 2020. The Tribes renew their motion for an injunction, seeking to shut down the pipeline following the D.C. Circuit's finding that the District Court failed to make the necessary findings to sustain injunctive relief. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.). **Dakota Access and the Army Corps still have not fulfilled the Tribes' request for the hydrostatic pressure test results to assess the integrity of pipeline.**

November 2, 2020. The Army Corps provides an update on the status and timing of its EIS process, informing the court that it will take longer than the initial forecast of 13 months.

November 4, 2020. The D.C. Circuit hears oral arguments in the appeal by the Army Corps and Dakota Access of the District Court's July 6 ruling. *Standing Rock Sioux Tribe v. Army Corps*, No. 20-5197 (D.C. Cir.).

04.2.6 2021

January 26, 2021. The D.C. Circuit Court of Appeals upholds the lower D.C. District Court decision finding the Army Corps violated NEPA by issuing an easement for the pipeline to cross federal lands without preparing an environmental impact statement and directing the Army Corps to prepare an EIS. However, the court reversed the lower court's order that the pipeline be shut down because it had not made the findings necessary to issue such an injunction. It leaves the decision to the Army Corps to determine how to "vindicate its property rights" as the pipeline no longer has an easement and is therefore encroaching on federal property. *Standing Rock Sioux Tribe v. Army Corps of Engineers*, No. 20-5197 (D.C. Cir.).

January 27, 2021. The D.C. District Court, to which the DAPL case was remanded following the D.C. Circuit Court of Appeals decision to strike the pipeline's easement, sets a status hearing for **Feb. 10, 2021**, to discuss the impact of the D.C. Circuit Court of Appeals ruling and the Army Corps' plans for how to proceed. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

February 9, 2021. The D.C. District Court resets the Feb. 10 status hearing for **April 9, 2021**.

February 15, 2021. The Army Corps extends invitations to the Standing Rock, Cheyenne River, Oglala, and Yankton Sioux Tribes to formally become cooperating agencies in the court-ordered EIS. The invitation comes five months following the Army Corps' publication of the NOI in the Federal Register announcing the EIS 45-day public scoping period. The Army Corps also invites the State of North Dakota to become a cooperating agency. The SRST, CRST, OST, and State of North Dakota accept the invitation; the YST declines the invitation.

April 9, 2021. In the status hearing, representatives from the Biden administration's DOJ, representing the Army Corps, indicated that the agency will not shut down the DAPL. This despite the ongoing threats the DAPL poses to the SRST and the fact that it is operating without a federal easement permit. The Army Corps and ET/Dakota Access continue to refuse to provide the Tribes with the results of the DAPL hydrostatic pressure tests.

April 19, 2021. State of North Dakota motions to intervene in the legal proceedings.

April 23, 2021. The D.C. Circuit Court of Appeals rejects request from ET/Dakota Access to rehear the company's appeal of a decision finding the oil pipeline's federal easement under Section 408 of the RHA and Section 28 of the MLA violated NEPA.

April 26, 2021. Judge Boasberg orders the Army Corps to provide a status report by May 3. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

April 29, 2021. Dakota Access notifies the D.C. Circuit Court of Appeals that it will file a petition for appeal with the Supreme Court for their review stating, "Dakota Access respectfully requests that this court stay its mandate pending the filing and disposition of a petition for a writ of certiorari. A stay would preserve the status quo, retaining jurisdiction in this court to consider a potential request for relief from vacatur while the Supreme Court considers the forthcoming petition."

May 3, 2021. Army Corps files the required status report and states that they estimate that the EIS will be completed in March of 2022.

The Army Corps also states they expect, “to use that timeframe to fulfill its commitment to undertaking an open, transparent, and public EIS process which rigorously explores and objectively evaluates reasonable alternatives. Further, the Army Corps is committed to robust tribal consultations and to actively engaging with the cooperating agencies, which include several Plaintiff Tribes, to produce a thorough and comprehensive EIS.” *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

May 21, 2021. D.C. District Court denies North Dakota’s motion to intervene. Judge Boasberg also rejects SRST’s motion for injunctive relief to shut down the pipeline due to irreparable harm, saying that existential harm from an unknown “future” or remote event is insufficient to constitute irreparable injury. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

June 11, 2021. Army Corps and Dakota Access file status reports asking the court to dismiss the case. Both the Army Corps and Dakota Access fundamentally believe the court should terminate these cases by dismissing, without prejudice, any claims for which judgment has not been granted. Dakota Access states, “the Court vacated the easement for the Lake Oahe crossing on July 6, 2020. That was the Court’s remedy after it previously granted, in part, Plaintiffs’ motions for summary judgment on claims that challenged the easement. The result of those two rulings is that no final agency action remains for the court to review. The EIS process that the Army Corps expects to complete in March 2022 will yield a new agency action based on an administrative record that the Army Corps has yet to complete.” Similarly, the Army Corps states, “that because the Tribes are participating in the EIS as cooperating agencies and the EIS is progressing,” that there is no need for Judge Boasberg “to continue to have jurisdiction over proceedings because there are not proceedings, the remand is in order and the EIS is being prepared.”

Tribes argue that the case should not be dismissed, despite the Army Corps’ commitment to the court to complete the EIS in March 2022. The Tribes state, “With respect to ‘next steps,’ the Tribes submit that this case is not over until the Army Corps has complied with NEPA and issued a new final easement decision. Under the ‘unusual’ facts of this case, *Standing Rock*, 985 F.3d at 1054, the pipeline continues to operate without an easement in violation of NEPA. The Army Corps continues to consider enforcement actions, which would likely spawn further litigation. And the Tribes may seek additional relief from this Court depending on the pace of the EIS and facts on the ground. Accordingly, this Court should retain jurisdiction over this case to ensure compliance with the EIS process, and to evaluate requests for interim relief.” *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

June 22, 2021. Dismissal. Essentially agreeing with the Army Corps and Dakota Access, and partially agreeing with Tribes about future litigation, Judge Boasberg issues an order dismissing the case without prejudice but retains jurisdiction in case of violations or what he anticipates will be additional litigation when the Final EIS is published in 2022. *Standing Rock Sioux Tribe v. Army Corps*, No. 1:16-cv-01534 (D.D.C.).

The Minute Order is as follows:

MINUTE ORDER: Having considered the parties’ 608 - 611 Status Reports, the Court ORDERS that: 1) In light of the Corps’ monthly public updates

and Plaintiffs' cooperating agency arrangements, the Court will not require independent updates or status reports; 2) All remaining outstanding counts are DISMISSED WITHOUT PREJUDICE, given Plaintiffs' lack of objection; 3) The Clerk shall TERMINATE this matter, but Plaintiffs may move to have it reopened in the event, for example, of a violation of the Court's prior Orders; and 4) Plaintiffs shall file a separate action if they wish to challenge the forthcoming EIS, which action they may mark as related to this one so that it will be assigned to this Court. So ORDERED by Judge James E. Boasberg on 6/22/2021

July 9, 2021. The Army Corps holds government-to-government consultation with the Tribes at Fort Yates on the Standing Rock Sioux Tribe Reservation. No progress is made regarding the Tribes' repeated requests for technical engineering information.

July 16, 2021. The Army Corps makes the PDEIS available to the Cooperating Agencies for review and comment by September 22, 2021.

September 3, 2021. The Army Corps announces that the timeline for completion of the DAPL EIS will be extended to September 2022 to allow sufficient time to gather additional data and conduct a more extensive impact analysis.

September 20, 2021. ET/Dakota Access petition the U.S. Supreme Court regarding the D.C. Circuit Court of Appeals decision on April 23, 2021. ET/Dakota Access contend the lower court ruling creates uncertainty for the pipeline and puts it "at a significant risk of being shut down, which would precipitate serious economic and environmental consequences." ET/Dakota Access asks the Supreme Court to reverse the appellate ruling ordering additional environmental review.

September 22, 2021. The SRST and CRST Tribal Chairmen and the OST Tribal President submit letters to the Assistant Secretary of the Army for Public Works, Jaime Pinkham (enrolled Coeur d'Alene Tribe), and to the Army Corps Omaha District Commander and District Engineer, Mark Himes, expressing dissatisfaction with the documentation and impact analysis in the PDEIS the Tribes received in July 2021. Tribal leaders echo what has become a continual theme: that the Army Corps and ET/Dakota Access continue in their collective refusal to provide the Tribes with the necessary and detailed technical information the Army Corps and its third-party contractor, ERM, are relying upon to conduct their impact analysis. Tribal leadership state that the lack of transparency doesn't allow the Tribes to properly evaluate the impacts of the DAPL, disregards the D.C. District Court's direction, and violates the spirit of the Tribes becoming cooperating agencies.

The Tribes further criticize the Army Corps for reneging on their statement to the D.C. District Court that was made on May 3, 2021, that the agency would "use that timeframe [preparation of the EIS, *emphasis added*] to fulfill its commitment to undertaking an open, transparent, and public EIS process which rigorously explores and objectively evaluates reasonable alternatives." The Tribes point out that the Army Corps has not upheld its commitment to "robust tribal consultations and to actively engaging with the cooperating agencies, which include several Plaintiff Tribes, to produce a thorough and comprehensive EIS."

Tribal leaders continue to raise concerns over the Army Corps' analysis, noting the PDEIS fails to give proper attention to the DAPL volumes doubling to 1.1 million bpd and underestimating the potential risks of a spill, and the ability to respond to it. The Tribal leaders point to the PDEIS' heavy reliance on the already faulty and flawed analysis in the EA and the Army Corps' poorly justified conclusions contained in their 2018 court-ordered remand analysis. The Tribal leaders also take issue with the inappropriateness of the third-party EIS contractor who has conflicts of interest as a member of the API, the largest oil and gas trade group in North America.

Tribal leaders demand that Assistant Secretary Pinkham remove the third-party contractor and restart the EIS process.

The Tribal leaders send an additional letter to President Biden on September 22, 2021, elaborating on the abysmal safety record of ET/Dakota Access/Sunoco. The letter focuses on PHMSA's July 22, 2021 notice citing Dakota Access' for significant safety violations found during their inspections of the DAPL in North Dakota from April 29, 2019 through August 30, 2019. The Tribes demand President Biden uphold his commitment to address tribal issues, honor tribal sovereignty, and to take action on the climate crisis by shutting down the DAPL and ordering the Army Corps to permanently vacate the easements at the Lake Oahe crossing.

October 8, 2021. The Army Corps meets with the OST for government-to-government consultation. During the five-hour long meeting, the OST announces their resignation as a Cooperating Agency for the DAPL EIS.

05. DAPL Technical Siting, Construction, Operation, and Safety Issues

Perhaps, no statement is more emblematic of the environmental justice and technical construction and operation issues that have plagued the DAPL project since its inception than Solicitor Tompkins' "M-Opinion" above.²⁴³ As for the ET's statement that the DAPL is "one of safest, most technologically advanced pipeline in the world,"²⁴⁴ the saying also goes... "Repeat a lie often enough and it becomes the truth." Such is the law of propaganda, and though often falsely attributed to the Nazi Joseph Goebbels, among psychologists, ET's statement is known as the "illusion of truth" effect.

While ET, the parent company of Dakota Access LLC and its allies and supporters repeat their illusion of truth, the Tribes' technical team of pipeline engineering, safety, environmental justice, and policy experts have methodically been challenging DAPL's safety assertions and the Army Corps' near-blind current acceptance of them. Section 5 looks at the key issues that have yet to be addressed substantively by the Army Corps, either in the court proceedings and certainly not in their *Analysis of Issues*.

While there is ample evidence in the NEPA process and court record of the Tribes' concerns about the potential significant, even catastrophic, impacts of a spill or leak on their short- and

"The Dakota Access Pipeline is built to be one of the safest, most technologically advanced pipelines in the world. Its safety factors and state-of-the-art construction techniques and redundancies, including construction and engineering technology, meet or exceed all safety and environmental regulations."

-Energy Transfer, Web site: dapipelinefacts.com

"...if existing safeguards are inadequate to mitigate spill risk from a pipeline running ten miles from a city, they nevertheless protect federally reserved tribal waters less than one mile from an Indian reservation."

-Hilary Tompkins, DOI Solicitor, December 4, 2016

long-term viability, it was not until the D.C. District Court's orders on June 14, 2017,²⁴⁵ and then again on March 25, 2020,²⁴⁶ that the technical and environmental justice issues regarding pipeline routing, engineering, and operation took centerstage in *Standing Rock Sioux Tribe v. Army Corps of Engineers*.

The court's 91-page Memorandum Opinion, filed on June 14, 2021, stated that Army Corps' permits authorizing the Lake Oahe crossing were, in part, deficient and therefore, a violation of NEPA because:

1. The Army Corps violated NEPA by not adequately considering controversy & disagreement among experts regarding spill risks.
2. The EA did not adequately examine the effect of a spill on Tribal traditional hunting & fishing rights.

243 Hilary C. Tompkins DOI Solicitor General. Tribal Treaty and Environmental Statutory Implications of the Dakota Access Pipeline. Memorandum Opinion, M-37038 at 4. (December 4, 2016). Available at: https://www.eenews.net/assets/2017/02/21/document_ew_05.pdf.

244 See: <https://www.dapipelinefacts.com/Safety.html>. (Accessed on May 10, 2021).

245 *Standing Rock*. Document No. 239 (June 14, 2017).

246 *Id.* Document No. 495 (March 25, 2020).

3. The EA did not adequately assess environmental justice impacts.

The court also admonished the Army Corps about its need for due diligence regarding its process and procedure in its court-ordered remand analysis:

“(T)he Court expects the Corps not to treat remand as an exercise in filling out the proper paperwork post hoc.”²⁴⁷

As a remedy, Judge Boasberg remanded the Army Corps to address the NEPA deficiencies requiring additional environmental analysis on the three issues identified above. The Army Corps completed their remand analysis and on October 4, 2018, filed a document with the court entitled, *Analysis of the Issues Remanded By the U.S. District Court Related to the Dakota Access Pipeline Crossing at Lake Oahe* (“Analysis of Issues”).

The court’s March 25, 2020 decision granted summary judgment to the Tribes, finding that the Army Corps failed to address multiple expert critiques of its flawed analysis of oil spill risks, and that the pipeline has “significant” environmental impacts requiring a full EIS.²⁴⁸ After considering extensive additional briefing and evidence, the district court vacated the easement and ordered pipeline operations suspended until the Army Corps completed an EIS and made an updated easement decision.²⁴⁹

The sometimes-violent clashes between law enforcement and the Water Protectors that had come to support the Tribes in the defense of their treaty lands against fossil fuel development have come to define a movement. Meanwhile, inside the Tribes’ administration buildings, multi-disciplinary teams of technical experts also worked together to challenge the Army Corps’ decisions regarding the DAPL. The technical team has conducted extensive analysis of the DAPL, resulting in the publication of five seminal reports that have been entered into the court docket. As well, despite the Army Corps’ best efforts to ignore them, these reports will be a basis on which challenges to the DAPL EIS will be mounted in what is most assuredly heading to more litigation in Judge Boasberg’s court.

05.1 Principal DAPL Engineering, Safety, and Policy Issue Areas

The four principal DAPL environmental, engineering, safety, and policy issues areas are:

- + Pipeline construction and horizontal directional drilling (HDD).
- + Pipeline routing across Lake Oahe and alternative routes.
- + Spill risk, safety, and emergency response.
- + Environmental Justice.

The four issue areas not only encompass the court’s decisions remanding additional analysis for the EIS but are also the issues that have been recognized by the Standing Rock Sioux Tribe since 2015. These issues were also well recognized by the Tribes of the Oceti Sakowin before the Army Corps released its Draft EA for the DAPL easement at Lake Oahe. Section

²⁴⁷ *Id.*

²⁴⁸ *Id.*

²⁴⁹ *Id.*

5.2 addresses the four issue areas that continue to be front and center as the Army Corps prepares and eventually publishes the Draft EIS, **likely sometime in mid-February 2022**.

05.1.1 Reports Used to Discuss the Principal DAPL Issues

The Tribes' technical teams are a multi-disciplinary team with educational and work experience in engineering; ecological, water, geological, and toxicological science; public and social policy; law; and economics. Even though the team includes several engineers, each of those individuals bring unique complementary knowledge and skills built on varied education and practical experience in oil and gas development, transmission, safety, and pipeline integrity management. For the purposes of addressing the four principal issue areas, the following principal reports are used in the discussion in this section:

- + ENVY. **Technical and Safety Assessment, Routing, Construction, and Operation of the Dakota Access Pipeline in North Dakota**. Report prepared for the Cheyenne River Sioux Tribe (Jan. 5, 2017) (hereinafter, "**Envy Report**").
- + Standing Rock Sioux Tribe. **Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux Tribe**. Report submitted to the Army Corps of Engineers for consideration in the remand analysis (Feb. 21, 2018) (hereinafter, "**SRST Spill Report**").
- + Standing Rock Sioux Tribe and Standing Rock Sioux Tribe Technical Team. **Report Addressing Deficiencies in the Corps of Engineers' Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe**. Report prepared for the Standing Rock Sioux Tribe in response to *Standing Rock Sioux Tribe v. Army Corps of Engineers* (Feb. 5, 2019) (hereinafter, "**SRST Remand Report**").
- + Donald S. Holmstrom, Esq. **Safety and Environmental Impact Analysis of the Energy Transfer's Dakota Access Pipeline Report to the Standing Rock Sioux Tribe**. Declaration submitted on behalf of the Standing Rock Sioux Tribe in *Standing Rock Sioux Tribe v. Army Corps of Engineers* (November 24, 2019) (hereinafter, "**Holmstrom Report**").
- + Army Corps of Engineers. **Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe**. (August 31, 2018) (hereinafter, "**Corps Analysis of Issues**").

Numerous other reports and declarations from the Tribes' technical experts, Army Corps, and ET/Dakota Access have been produced and introduced to the court docket and will be discussed and cited as appropriate for the discussion of the four principal issues in this section.

05.1.2 Case History Pertaining to the D.C. District Court Remand

The D.C. District Court ruled on remand on June 14, 2017, issuing a 91-page Memorandum Opinion stating that the Army Corps had violated NEPA.²⁵⁰ The order states that the Army Corps' *Final EA Amended and Mitigated FONSI, Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands* was deficient in three areas in failing to adequately

²⁵⁰ *Standing Rock*. Document 239 (Jun. 14, 2017).

assess: 1) impacts of a spill on the Tribes' traditional hunting and fishing rights; 2) the controversy & disagreement among experts regarding spill risks; and 3) environmental justice.

On October 4, 2018, the Army Corps filed a document entitled, *Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe*, the having only sent a letter to the SRST Tribal Chairman on September 25, 2017, requesting information on the issues it stated it would address in the court ordered remand analysis.

The Tribe responded by requesting a government-to-government consultation meeting in letters to the Army Corps dated October 6, 2017, December 18, 2017, and January 4, 2018.²⁵¹ The SRST's Chairman Mike Faith in his October 6 letter stated, "I further ask(ed) the Corps to come to Standing Rock, to discuss the remand process on a government-to-government basis." The SRST departmental staff and technical staff completed the two-volume 350-page *SRST Spill Report* on February 21, 2018. **The report was ignored by the Army Corps.**

The *SRST Remand Report* states, "the Corps would not meet with the Tribe early in the process of preparing its *Analysis of Issues*, as required by E.O. 13175 and as requested by Tribal leadership. On November 27, 2017, Col. John Hudson wrote to Standing Rock Tribal Chairman Mike Faith stating, "I am willing to meet with Tribal representatives at your Reservation, but I believe the meeting would be most productive after the Corps has the opportunity to review the information your Tribe may submit... Please send the requested information by December 20, 2017..." Thus, **the Army Corps imposed conditions on the Tribe for government-to-government consultation, requiring the Tribe to answer certain questions posed in prior correspondence.** The Army Corps failed to engage the Tribe early in the process, and in a respectful manner with mutually agreed-upon protocols, as required.²⁵²

The Tribes participated in good faith in the remand process, repeatedly seeking formal consultation as required under federal law and asking for key technical information for review and comment.²⁵³ But the Army Corps stonewalled their efforts, forcing the Tribes to ask the court to require the Army Corps' full participation.²⁵⁴ Standing Rock Chairman Mike Faith refers to an Army Corps document which states that their analysis "identified no new information" on the pipeline's impact on the Tribes. This memo, dated February 4, 2018, was produced three months before the Army Corps ever met with the Tribes. Chairman Faith argued that the Army Corps came to a premature conclusion, calling it "...a rigged process intended to justify a dangerous and illegal pipeline."

Despite the lack of cooperation, the SRST submitted an extensive body of technical information critiquing the assumptions built into the Army Corps environmental analysis and disputing the Army Corps' conclusion that the risks of spills were too insignificant to merit full NEPA review.²⁵⁵ Those comments highlighted a range of

251 Letter of Chairman Dave Archambault II, Standing Rock Sioux Tribe to Col. John L. Hudson, Omaha District Commander, U.S. Army Corps of Engineers, Oct. 6, 2017; Letter of Chairman Mike Faith, Jr., Chairman, Standing Rock Sioux Tribe to Col. John L. Hudson, Omaha District Commander, U.S. Army Corps of Engineers, Dec. 11, 2017; Letter of Chairman Mike Faith to Col. John L. Hudson, Omaha District Commander, U.S. Army Corps of Engineers, Jan. 4, 2018.

252 Department of Defense, *American Indian and Alaska Native Policy*.

253 Tribe says Army Corps' Dakota Access pipeline findings preordained. Minnesota Public Radio (February 28, 2019). Available at: <https://www.mprnews.org/story/2019/02/28/tribe-says-corps-pipeline-findings-preordained> (Accessed on: June 22, 2021).

254 *Standing Rock*. Motion for Clarification RE Remand Process and Remand Conditions. Document 336 (March 2, 2018).

255 *SRST Spill Report*. (Feb. 21, 2018).

major technical flaws, faulty assumptions, and overlooked issues (See technical sections below further detailed discussion).²⁵⁶

The Army Corps completed the remand in late August 2018. Despite the extensive evidence demonstrating pervasive problems, the Army Corps affirmed their decision from the Final EA not to prepare an EIS.²⁵⁷ The Tribes challenged this decision anew, moving for summary judgment on their claim that the remand analysis violated NEPA.²⁵⁸

Colonel Hudson's November 27, 2018 letter demonstrates that the **Army Corps' refusal to properly consult with the Tribe was intentional and strategic.** The Army Corps did not consult with the Tribe on issues to be evaluated in the report – it demanded written answers related to issues that it identified unilaterally and refused to meet and listen to the Tribe's concerns until it got its way. **The lack of consultation resulted in the issuance of a report by the Army Corps that failed to address virtually any of the concerns expressed by the Tribe over the potential impacts of an oil spill on the Standing Rock Sioux Reservation.**²⁵⁹

Of the issues that were addressed, the Army Corps dismissed them for lack of the Tribe's consultants providing counter methodologies or studies to the Army Corps. This bold assertion by the Army Corps was made in light of the Army Corps' and Dakota Access' consistent refusal to fulfill the SRST's repeated requests for key unredacted technical data – pertaining, for example, to the DAPL spill modeling – that would allow the SRST's technical experts to conduct such analyses. One exception was an environmental justice study submitted on February 28 by CRST to the Army Corps by Saha and Mohaj, *An Environmental Justice Analysis of Dakota Access Pipeline Routes* (February 23, 2018), which the Army Corps took great pains to try to discredit in favor of defending their own revised environmental justice analysis in their Analysis of Issues.

On March 25, 2020, Judge Boasberg granted a request (for summary judgement) filed on August 16, 2019, by the SRST to strike down federal permits for the DAPL. The Court found the Army Corps violated NEPA when it affirmed the federal permits for the pipeline originally issued in 2016. Specifically, Judge Boasberg found significant unresolved concerns about the potential impacts of oil spills and the likelihood that one could take place. In that Memorandum Opinion, **Judge Boasberg cited the Tribe's arguments from the 2018 SRST Spill Report and the 2019 SRST Remand Report as evidence supporting his ruling** but made little mention of the Army Corps' *Analysis of Issues*, other than mentioning in his ruling that there was expert disagreement.

Judge Boasberg also ordered the Army Corps to prepare an EIS on the pipeline, something that the Tribe has sought from the beginning of this controversy. The court asked the parties to submit additional briefing on the question of whether to shut down the pipeline in the interim. The issue was scheduled to be fully briefed by May 27, 2020, with a decision expected sometime after that.

On July 6, 2020, Judge Boasberg ruled that the DAPL must halt operations while the government conducts the EIS. After carefully analyzing the seriousness of the government's NEPA violations, and the potential impacts on the Tribe, Judge Boasberg concluded that shutting down the pipeline was necessary. The shutdown was ordered to begin on August 5, 2020 and would have remained in place pending completion of the EIS. Dakota Access was

²⁵⁶ *Id.*

²⁵⁷ Army Corps, *Analysis of Issues* (Oct. 4, 2018).

²⁵⁸ *Standing Rock*.

²⁵⁹ *SRST Remand Report* at 21. (Feb. 5, 2019)

given 30 days to drain the pipeline. Later that same day, Dakota Access, LLC filed an appeal seeking to overturn the court-ordered shutdown in the D.C. Circuit Court of Appeals.

On July 10, 2020, Dakota Access, LLC filed an emergency motion with the D.C. Circuit Court of Appeals, asking the court to stay Judge Boasberg's order to shut down the pipeline by August 5, 2020. Ten days later, on July 20, 2020, the SRST filed a motion in opposition to Dakota Access' request.

On August 5, 2020, the day that had been initially set as a deadline for shutting down the DAPL, the D.C. Circuit Court of Appeals issued a mixed decision that, while agreeing with the lower district court that the Army Corps had violated NEPA and that requiring an EIS was the proper decision, the court disagreed with the lower court that shutting the DAPL was warranted during the EIS process. That circuit court of appeals order effectively allowed oil to continue flowing. At the same time, the appeals court dissolved an administrative stay, vacating the permit for the pipeline to cross underneath Lake Oahe, which leaves the pipeline operating illegally. The circuit court of appeals left the decision to shut down the DAPL with the Army Corps.

On August 25, 2020, the Army Corps and Dakota Access, LLC filed their appeal briefs²⁶⁰ with the D.C. Circuit Court of Appeals challenging virtually everything the D.C. District Court had ruled on. The briefs requested the court of appeals overturn the district court's ruling regarding the Army Corps' NEPA findings in the EA were deficient in addressing impacts to treaty hunting and fishing rights, disagreement with the SRST's experts over spill risk, and environmental justice. Dakota Access and the Army Corps also ask the court of appeals to overturn Judge Boasberg's order to vacate the easement and right-of-way permits, and to also overturn his order shutting down the DAPL.

Following a status hearing in the D.C. District Court on August 10, 2020, the Army Corps filed their status report on August 31, 2020, as required by Judge Boasberg during that early August hearing. **Army Corps reported that although the DAPL constituted an encroachment on federal property, the Army Corps retained discretion through their policies to monitor the pipeline and the DOJ could bring enforcement actions for violations should they occur.**²⁶¹

Arguments between the Tribes, Dakota Access, and the Army Corps regarding shutting down the DAPL while the EIS was in progress continued through the remainder of 2020 and culminated in case dismissal on June 22, 2021. The Army Corps notified the D.C. District Court on July 22, 2021 of the DAPL violations issued by PHMSA (See: Section 5.2.3.2, *PHMSA Cites the DAPL for Significantly Dangerous Safety Violations*) and that, "The Corps is considering PHMSA's NOPV as part of both its: 1) ongoing consideration of whether and how the Corps will enforce its property rights; and 2) ongoing Environmental Impact Statement ("EIS") process." As of the publication of this document, the **Army Corps has taken no further enforcement action** (e.g., shutting down the pipeline for violations), though they have extended the finalization of the EIS to September 2022, at the Tribes' request.²⁶²

²⁶⁰ Briefs from Dakota Access and Army Corps to D.C. Cir on Aug 25.

²⁶¹ *Standing Rock*. Document no. 562 at 4, 5-9 (Aug. 31, 2020).

²⁶² *Standing Rock*. Document no. 612 (July 22, 2021).

05.2 Discussion of Major DAPL Engineering, Safety, and Policy Issues

Both Dakota Access and the Army Corps refer to the Tribe's experts who prepared the *SRST Remand Report* as "litigation-driven consultants lacking oil-spill modeling expertise." Regardless of the attempted character assassinations, the briefs fail to mention the Army Corps' and Dakota Access' unwillingness to share with the Tribes and their "litigation-driven consultants" the requested data and documents necessary to assess the conclusions in the Army Corps' *Analysis of Issues* and that the Army Corps ignored the 2018 *SRST Spill Report*. *DAPL Technical Siting, Construction, Operation, and Safety Issues 5-1* is from the *SRST Remand Report* and lists the relevant documents and standards the Army Corps disregarded in their *Analysis of Issues*.

05.2.1 Pipeline Construction and Horizontal Directional Drilling Issues

05.2.1.1 The Challenges of the DAPL HDD at Lake Oahe

Compared to the alternatives of truck and rail, pipelines are a safer mode of transporting crude oil and other hazardous liquids over long distances.^{263,264} Pipeline construction techniques typically utilize dry and wet open-cut methods to excavate a trench to place and bury a pipeline below ground. While "trenching" is the predominant construction technique, horizontal directional drilling (HDD) is a specialized trenchless technique that enables a pipeline to be placed beneath a structure (e.g., railway, road, river, etc.). The HDD method involves first drilling a pilot bore in one location and next enlarging the drilled pilot bore to facilitate the installation/pulling of the required pipeline or bundle ("product pipe") through the bore from the entry point on one side to exit on the other side (**See: Figure 5-1 and DAPL Technical Siting, Construction, Operation, and Safety Issues2**). HDD was the construction method used to install the Sacagawea Pipeline under the upper portion of Lake Sakakawea, north of the Missouri River, and under Lake Oahe, north of the confluence with Cannonball Creek.²⁶⁵ The Lake Oahe crossing was 7,800-feet (1.47 mi) in length and placed 92 feet below the lakebed.

²⁶³ Diana Furchtgott-Roth, Senior Fellow. *Pipelines are Safest for Transportation of Oil and Gas*. Manhattan Institute for Policy Research. Issue Brief No. 23. (June 2013). Available at: https://media4.manhattan-institute.org/pdf/ib_23.pdf. and <https://www.manhattan-institute.org/html/pipelines-are-safest-transportation-oil-and-gas-5716.html#VEkKrCtdWQw>

²⁶⁴ *Envy Report* at 5 (Jan. 5, 2017).

²⁶⁵ *Id.* at 1.

Table 5-1. List of relevant documents and standards the Army Corps disregarded in their Analysis of Issues.

	Specific Documentation Submitted to and/or Requested from the Army Corps
Documents produced by the Tribe and are part of the administrative record but not cited or acknowledged in their report	Standing Rock Sioux Tribe, EIS Scoping comments, Feb. 7, 2017.
	Standing Rock Sioux Tribe, PowerPoint presentation given to COE on Dec. 2, 2016.
	Second Declaration of Donald Holmstrom dated March 23, 2018.
Documents required to be produced to ACE by the EA and easement conditions	Risk Assessment, Spill Model, and Operations and Maintenance Manual.
	Evaluation of Hydrocarbon Releases into Lake Oahe using OILMAP and SIMAP Trajectory, Fate, and Effects Modeling for the Dakota Access Pipeline (February 12, 2018) (Spill Model Report).
	Full documentation of the OILMAP and SIMAP spill modeling including all reports, inputs, Lake Oahe-specific inputs, Bakken crude characteristics inputs, action levels, etc.
	Downstream Receptor Report.
	Corps Letter to ETP/Sunoco (August 24, 2017) referencing spill modeling and WCD.
	DAPL Integrity Management Plan (IMP)
	Revised Facility Response Plan (FRP), Geographic Response Plan (GRP) and risk analysis report incorporating the spill modeling analysis produced at the request of the COE.
DAPL Pipeline Surge Analysis Report	
Documents that must be developed under pipeline safety good practice standards and guidelines	Leak detection performance criteria as required by API RP 1175.
	Leading and lagging pipeline safety performance indicators required by API RP 1173.
	Root cause incident investigation reports and recommendations required by API RP 1173 including those for the 11 recent DAPL spills.
	Safety culture evaluations required by API RP 1173.
	Leak detection performance metrics required by API RP 1175.

05.2.1.2 Pipe Assembly and Placement Issues

Inserting a 30-inch diameter pipeline in a bore 7,800 feet across and 92 feet below the lakebed is no small feat. The *Envy Report* described the process as follows:

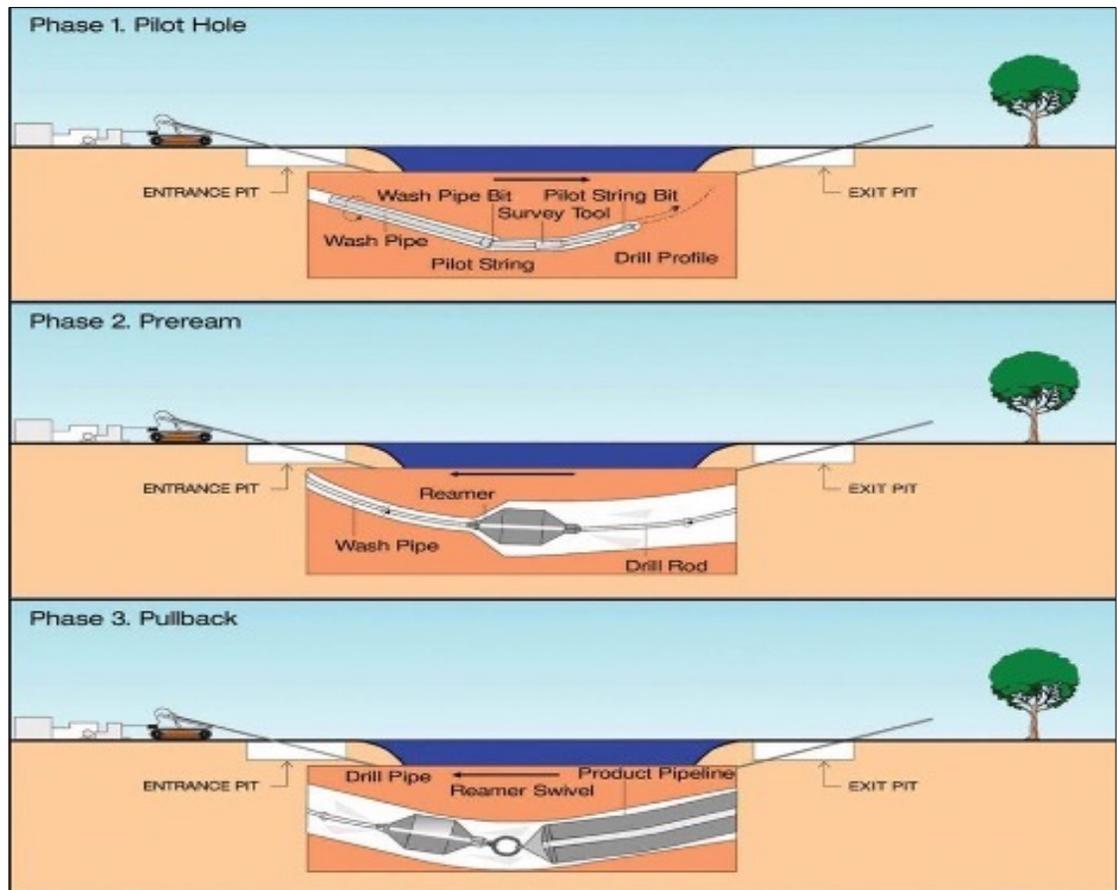
“In order to lay a pipeline below Lake Oahe, the construction contractor must drill a horizontal lateral that is about 1.5 miles long and then pull a 30-inch diameter, 0.625-inch-thick **pipe** that is **extremely heavy** and would be **hard to pull over a** long bore hole (See: **Figure 5-1** and **Figure 5-2**). In addition, metal pipe is **subject to additional stresses** by having to go around two corners.

Although the pipeline is pre-welded, tested before insertion, and likely fed to the inlet of the bore on a roller system, the **real construction risk lies below surface**. Theoretically, stresses on the **pipeline sections and the pipeline as a whole increase as each welded section goes underground** into the lateral. Considering that **each 40 ft. section** of metal pipe weighs approximately **7,850 lbs.** (approximately, **196.26 lbs. per foot**), or **nearly four U.S. tons**, the pipe simply becomes **dramatically heavier as the welded pipe sections are pulled** through the bore hole below the surface; thereby, **increasing the stresses on the pipe materials and welding** workmanship (See: Figure 5-3 and Figure 5-4).

05.2.1.3 Weld Flaws Impact Pipe Integrity

Every weld in a pipeline is a critical link on which the system depends. Weld failure has significant consequences – not just for project delays and increased costs but also for the

» Figure 5 1. Horizontal directional drilling procedure



potential environmental disaster that could result. All weld defects have the potential to cause serious problems in welds – and therefore pipeline integrity. The *Envy Report*, see *Envy*, Section 2.3, provides a detailed technical discussion of the issues with welds and welding.²⁶⁶ For purposes of this report, **basic weld flaws** that may have occurred in stringing the pipeline segments together to complete the construction beneath the lakebed of Lake Oahe are defined below. **Figure 5-4** depicts some typical sources of pipeline failure and

- » Figure 5-2. Staging area for the DAPL Lake Oahe HDD entry bore (view from east to west side)



- » Figure 5-3. Typical weld string for the DAPL before placement in trench (not HDD).



²⁶⁶ *Id.* at 12-13 (emphasis added).

» Figure 5 4. Typical sources of failures that threaten the integrity of oil and gas pipelines.



Figure 5-5 depicts how radiographic detection (x-rays) of potential weld failure points are detected and evaluated.

Pinholes in welds can cause leaks in pipelines and can be a big problem as they are known to lead to spills that possibly will not be detected over a long time (Figure 5-6). **These long, slow leaks can then spill over weeks or months and are not recognized with the conventional leak detection systems (e.g., Supervisory Control and Data Acquisition; aka SCADA). Pinhole leaks are one of the main concerns regarding the welding of sections that were pulled from the entry bore hole on the west side of the Lake Oahe crossing to the east side.**

In 2016, federal pipeline inspectors from PHMSA were inspecting construction of the Permian Express II pipeline, owned by ET. Unqualified welders working for Sunoco Logistics, another ET subsidiary, were fusing the pipe together in central Texas using unapproved methods. PHMSA regulators in May 2016 issued a "Notice of Probable Violation" by PHMSA and levied a \$1.3 million fine for construction welding practices and use of unqualified welders.²⁶⁷ Company attorneys said the pipe was sound and the problems flagged by PHMSA were "insignificant deviations."²⁶⁸

Four months later, the new pipeline leaked more than 33,000 gallons of oil through a hole next to a weld. It took crews 12 days to find the leak. On September 14, 2016, PHMSA issued a Corrective Action Order (CAO) requiring a plan for restart and repairs – one of many Sunoco/ETP enforcement actions by the federal regulator. CAOs are one of PHMSA's most serious enforcement tools – one that is rarely employed.²⁶⁹

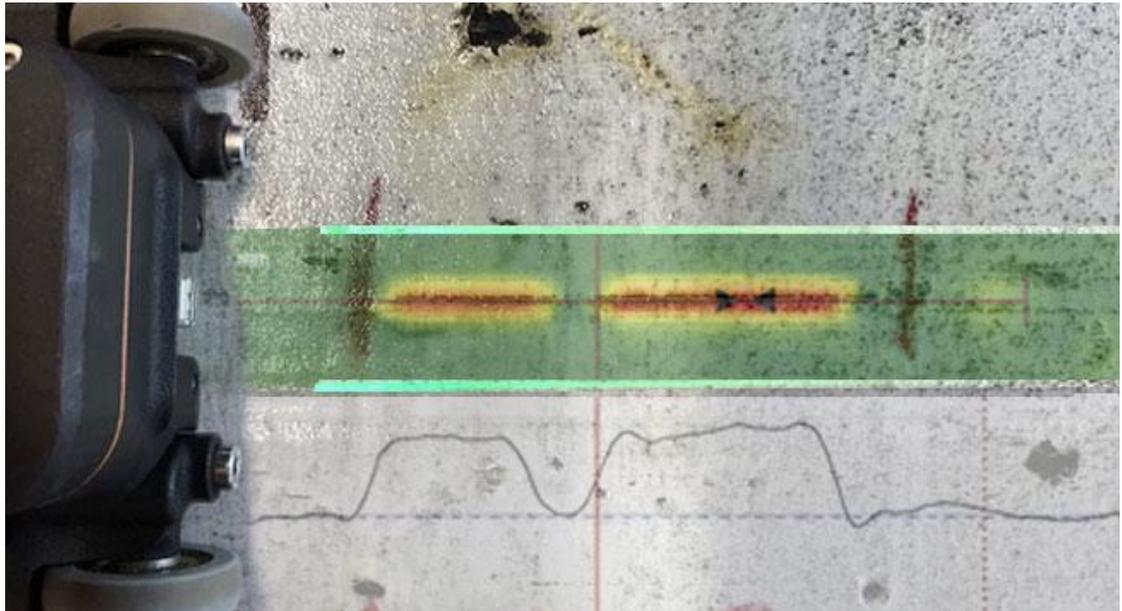
PHMSA may initiate a CAO case if it determines that a particular pipeline represents a serious hazard to life, property, or the environment. They usually address urgent situations arising out of an accident, spill, or other significant, immediate, or imminent safety or environmental concern. CAOs require operators to take specific necessary actions to address conditions that must be taken by the operator to assure safe operation. These actions may include the shutdown of a pipeline or operation at reduced pressure, physical inspection or testing of

²⁶⁷ U.S. regulator orders inquiry, repairs after Sunoco's Permian Leak, Reuters, (Sept.15, 2016). Available at: <https://www.reuters.com/article/U.S.-pipeline-sunoco-logistics/u-s-regulator-orders-inquiry-repairs-after-sunocos-permian-leak-idUSKCN11L2CM> (Accessed on May 1, 2021).

²⁶⁸ Trails of spills haunts Dakota Access developer. (May 26, 2020). Available at: <https://www.eenews.net/stories/1063234239> (Accessed on May 1, 2021).

²⁶⁹ Declaration of Donald S. Holmstrom.

- » Figure 5 5. Location and detection of weld corrosion, pitting, and cracking in oil and gas pipelines using radiography (x-rays).



- » Figure 5 6. Pinholes of varying stages and diameters in a welded seam.



the pipeline, repair or replacement of defective pipeline segments, and similar measures. CAOs do not reflect those cases which PHMSA has referred to other federal officials for criminal prosecution, nor does it include more egregious civil cases that are referred to the U.S. Department of Justice for judicial enforcement.

From 2006 to 2017, Sunoco had incurred 291 hazardous liquid pipeline incidents - more than any other pipeline operator for that period in the PHMSA operator database. Those incidents resulted in \$56,590,698 in property damage.²⁷⁰ **The 2016 Sunoco/ETP spill highlights many of the technical health, safety, and environmental concerns raised by the Standing**

²⁷⁰ SRST Spill Report at 30.

Rock Sioux Tribe and its experts to the Army Corps in the NEPA process and litigation related to the DAPL.²⁷¹

Because bacteria are found in everything from soil to oxygen to the product in a pipeline, these microorganisms can cause corrosion, which can result in damage to the metal.

Certain types of bacteria produce different by-products (like sulphuric acid) in their processes, and these activities can result in the formation of corrosion, which can damage pipelines. This process is called microbially-induced corrosion.

Sophisticated data analysis plays an important role in preventing leaks. In-line inspection devices gather troves of information about the pipeline. Advanced software can evaluate this data alongside geographic information from the right-of-way to create risk profiles for each foot of pipe. Specialized cameras can detect evaporated hydrocarbons that cannot be seen by the naked eye. This technology uses hyperspectral imaging. Hyperspectral images can show extremely low volumes and concentrations of evaporated hydrocarbons within a one-mile radius of the camera. Fiber optic cables installed alongside a new pipeline can help detect tiny leaks because they can sense unexpected local changes of temperature that can be caused by the leak of liquid that is either warmer or colder than surrounding soil. Fiber optics are also capable of acoustic sensing, which allows them to sense vibrations caused by flow from a pipe.

Before repair and maintenance could begin, the operator would have to carefully divert the product around the segment that is being repaired. One of the most common methods of repair is to recoat the pipeline with epoxy and cover the entire section with a sleeve. This is then clamped to a specified pressure to ensure an effective seal, and the seams of the sleeve are welded. The *Envy Report* discusses how this type of repair would be completely untenable for the DAPL underneath Lake Oahe because of its location at least 92 feet below the top of the lakebed.²⁷²

Misalignment (“HiLo”) is the difference between the internal and/or external heights of two pipes. Poor alignment of the pipeline segments causes a weaker weld that is less able to cope under high fatigue conditions.

Excessive penetration occurs when excess weld metal protrudes through the weld root. The weld root is the point at which the back of a weld intersects with the base metal surfaces. It determines the weld penetration in the gap between two pipeline segments and the fusion to form a rigid joint. Excessive penetration is usually caused by a joint gap that is too large, root faces that are too small or heat input that is too high, which can cause erosion and/or corrosion. Better pipe fit-up and ensuring correct weld technique will reduce the risks of excessive penetration.

Root concavity, concavity, and suck-back is when a shallow groove appears in the root of the weld and happens when the pool shrinks within the weld. Weld pool commonly refers to the dime-sized workable portion of a weld where the base metal has reached its melting point and is ready to be infused with filler material. The weld pool is central to the success of the welding process. The weld pool must be carried along the joint in a consistent width and depth, and the motion used to carry the weld pool has a direct effect on the quality of the weld bead.

²⁷¹ *Id.*

²⁷² *Envy Report* at 13.

Cracking is the most serious weld defect. Cracks will eventually cause a weld to fail, and welding contractors go to great lengths to avoid them. As discussed, welds are under continual internal stress from fatigue, bending, flexing, expansion, contraction, and cracking which occurs when the internal stresses exceed either the base metal, the weld metal or both. Hot cracks happen at temperatures over 1,000°C (1,832°F) and are usually caused by contamination or material problems. Cold cracks occur after the weld has cooled and crater cracks appear because the weld does not have enough volume. Preparing welds carefully, choosing the correct materials, and storing them safely will help to prevent cracking.

Incomplete fusion occurs when the weld fails to fuse. Lack of penetration happens when both sides of the root fail to fuse to the weld. Undercutting is a groove that appears in the base metal near the weld. Correct preparation of the joint and base metal surfaces (e.g., interior of pipeline), along with use of correct materials and welding techniques can help to prevent these defects, which can lead to poor quality, weak welds, and eventual cracking, from occurring.

Various national and international standards exist to specify what level of imperfection is acceptable. However, even when the best quality welding is carried out in optimum conditions by perfectly trained welders, **defects will occur.**²⁷³ The *Envy Report* states:

“At these weak links, a pipeline rupture during construction underground could occur and the gravity of the impact is magnified because it is no longer possible to visibly or otherwise detect the damage on the outside of the pipeline. Even with a pipeline pig inspection (Figure 5-7), it is not possible to detect all external wall damage or many internal pipe-wall damages due to stresses from construction.

It is inevitable that some of these HDD construction risks will likely result in pipeline damage and that damaged pipe will be installed in the bore hole. The extent of the damaged pipe finally installed is nearly impossible to detect or remedy and the only way regulators or the public will ever know is some time has passed after the leak has occurred. Undetectable underground leaks pose some of the most significant environmental pollution risks throughout the life of the pipeline and potential risks increase over time through corrosion, landslide movement or other disruptive forces.”²⁷⁴

ET, in referring to the DAPL, makes bold claims about their safety exceeding standards stating, “we non-destructively tested 100% of the mainline girth welds by x-ray or ultrasound, while it is only required for 10% of welds to be tested.”²⁷⁵

Pigs that monitor the condition of the pipe are often categorized as in-line inspection tools, or sometimes “smart pigs” (Figure 5-7). While no discussion on smart pigs and application limits are discussed in detail in the Final EA or the Army Corps’ Analysis of Issues, it’s important to note that smart pigs are very limited for inspection of girth weld areas along the pipe. There are approximately 178 girth welds in the proposed pipe length that will go under Lake Oahe (~7,800 ft from entry to exit and 40 ft sections). Girth welds are potentially the most likely root cause of future leaks due to corrosion,

²⁷³ *Id.*

²⁷⁴ *Id.*

²⁷⁵ See: <https://www.dapipelinefacts.com/Safety.html> (Accessed on: June 22, 2021).

micro-crack propagation over time, or pinhole propagation that eventually leads to long, slow leaks in the HDD section. Proper field assessment of all such girth welds is critical for this route alternative. **The Final EA, however, did not address how Dakota Access/Sunoco intended to detect potential leak volumes from girth welds. This is most likely because there is no instrumentation that can adequately detect long, slow leaks along the HDD section of the proposed pipeline. Long, slow leaks are considered acceptable by industry standards because even the best practices cannot limit their existence.** However, the EIS must acknowledge and address the risk of long, slow leaks and related short- and long-term impacts to the surrounding environment and the SRST and the other Tribes downstream who depend on the Missouri River.

The *Envy Report* details the risks from welding and pulling a pipe that weighs close to 200



» Figure 5.7. Depiction of a typical smart pig in use in a pipeline.

lbs/ft. Furthermore, the *Envy Report* details how this factor must be considered in the EIS to assess the post construction risks, identification of damage to the pipeline external wall, girth welds and internal pipe wall from over-pulling, scraping and other various factors. **A detailed mitigation or remediation plan that avoids any acceptable leak volumes from the HDD pipeline section should also specifically be addressed in the EIS.**

Throughout the recent court proceedings, the fact that the DAPL has thus far operated without major incident is irrelevant. Dakota Access and the Army Corps have yet to produce the requested results of their hydrostatic testing. Status reports required by Judge Boasberg revealed little detail and consisted of mere “check-the-box” forms and one-line statements, essentially stating the DAPL had no reportable integrity issues. Sadly, the D.C. Court accepted these reports without question.

The Army Corps’ and Dakota Access’ lack of transparency in their unwillingness to share crucial technical engineering and planning information with the Tribes raises more questions about the integrity and safety of the DAPL and their unsubstantiated claims that it is “one

of the safest and most technology-advanced pipelines ever constructed.” **Despite the ET/Dakota Access claims, their operating company, Sunoco, has the worst safety record of any operator in the PHMSA database.**²⁷⁶

ET acquired Sunoco in early 2012 for \$5.3 billion.²⁷⁷ On September 14, 2016, the PHMSA issued a Corrective Action Order (CAO) on ET’s Permian Express II crude oil pipeline in central Texas, and operated by Sunoco, requiring a plan for restart and repairs – one of many Sunoco²⁷⁸ enforcement actions by PHMSA. A few months earlier on the same pipeline it was reported that Sunoco had been issued a “Notice of Probable Violation” by PHMSA that included a \$1.3 million fine for construction welding practices and use of unqualified welders.²⁷⁹ In 2020, a former weld inspection technician working on ET’s Mariner line in Pennsylvania admitted to falsifying 77 welding records along a 20-mile segment of pipe that he worked on from 2017-2018.²⁸⁰

With good reason, the SRST technical team continues to make formal FOIA requests for drilling logs and the results of hydrostatic testing from the Army Corps to better ascertain what problems may have arisen during boring, welding, pipe pulling, completion, and pressure testing that could be indicators of compromised pipeline integrity. The Army Corps continues to deny these requests under the guise of PHMSA rules regarding the need to protect this information in the “national interest.” In the past, the Tribes’ technical experts have willingly signed other legal non-disclosure documents that would allow them to review and evaluate the methodologies and data inputs for spill modeling, though this information has been heavily redacted to the point of being nearly unusable. Drilling logs, however, do not have the same sensitivity and the Tribes have long questioned the Army Corps why this information requires protection “in the national interest.” Like the methodologies and data that required the Tribes’ technical experts to sign non-disclosure agreements, drilling logs and hydrostatic test results could be released to these experts for review. By not doing so, the Army Corps’ and Dakota Access’ stonewalling behavior could only be interpreted as yet another attempt to cover up potentially serious problems and issues encountered in the Lake Oahe HDD process which have created potential threats to the integrity of the DAPL.

05.2.1.4 Other Technical Issues Relevant to the HDD Crossing at Lake Oahe

The *Envy Report* also categorized other issues relevant to the construction and current operation of the DAPL.²⁸¹ These issues, while highly relevant, were not adequately addressed in the Final EA or by the D.C. District Court. The Tribes and their technical experts, however, once again raised these issues in their comments submitted during the public scoping

²⁷⁶ Former technician admits to falsifying weld records on Mariner East pipeline in Westmoreland County, Pittsburgh Post-Gazette (June 22, 2020). Available at: <https://www.post-gazette.com/news/crime-courts/2020/06/22/joshua-springer-former-technician-admits-falsifying-weld-records-mariner-east-pipeline-pa-energy-transfer/stories/202006220094>. (Accessed on: June 9, 2021).

²⁷⁷ ET, Energy Transfer Partners to acquire Sunoco in \$5.3 billion transaction. Available at: <https://ir.energytransfer.com/news-releases/news-release-details/energy-transfer-partners-acquire-sunoco-53-billion-transaction>. (Accessed on: June 22, 2021).

²⁷⁸ For purposes of this technical report Sunoco and Energy Transfer Partners will be treated as the same party. Sunoco and ETP completed their merger in April 2017 and Sunoco changed its name to Energy Transfer Partners. Sunoco was announced early on as the operator of DAPL having drafted a version of the facility response plan in 2015. DAPL is a pipeline joint venture with ETP having the controlling interest.

²⁷⁹ U.S. regulator orders inquiry, repairs after Sunoco’s Permian Leak, Reuters, 9-15-16, Available at: <https://www.reuters.com/article/U.S.-pipeline-sunoco-logistics/u-s-regulator-orders-inquiry-repairs-after-sunocos-permian-leak-idUSKCN11L2CM>. (Accessed: Jul.1, 2021).

²⁸⁰ Former technician admits to falsifying weld records on Mariner East pipeline in Westmoreland County, Pittsburgh Post-Gazette (June 22, 2020). Available at: <https://www.post-gazette.com/news/crime-courts/2020/06/22/joshua-springer-former-technician-admits-falsifying-weld-records-mariner-east-pipeline-pa-energy-transfer/stories/202006220094>. (Accessed on: June 9, 2021).

²⁸¹ *Envy Report* at 13-15.

period for the EIS that concluded November 26, 2020. These other relevant issues requiring consideration in the EIS include:

REPAIR AND REPLACEMENT

*“The risks of damage to the pipe due to construction risks are not insignificant; once the pipeline was placed in the bore hole under Lake Oahe, there was little opportunity to remedy major problems that would require replacement of sections. The damage to the pipeline from construction is likely to be exacerbated over the years of operation. Large volumes of fluid flowing through the pipe causes significant friction and stress over time through vibrations, changes in pressure and temperature, and any natural movement of soils and the geologic subsurface. The pipeline expansion that doubles the flow from 570,000 bpd to 1.1 million bpd is likely to add additional stressors that may be impacting the pipeline integrity. **The Tribes and their technical experts have raised this as a significant issue that the Army Corps will need to address in the EIS.**”*

*Compared to a long bore HDD, pipeline repairs and replacement can typically be achieved where relatively short sections are accessible over land or under a short river or stream crossing. However, **irreparable damage to the 7,800 ft (1.5 mile) horizontal lateral under Lake Oahe would likely cause the pipeline to be abandoned as it is not practical to remove damaged sections for repair and/or replacement.** Costs associated not only with the repair, but the time the pipeline would be down would result in a considerable loss of revenue.*

If the mitigation requires repair or replacement (not just monitoring) the entire HDD construction must be abandoned, and a new pipeline built. One cannot replace only a section of damaged pipe as can be done in a pipeline constructed in a trench. The success/failure of any HDD this long relies too heavily on a risky construction method that doesn’t allow for an expedient, environmentally- and mechanically-sound repair or replacement to any section of the pipeline at Lake Oahe which will bring up the new construction challenges and environmental risks.”²⁸²

Where leaks occur and repair and/or replacement costs are high, the record indicates that the pipeline operator, Sunoco, would continue operating without redress of the leaks. As noted in Section 5.2.1.3 *Weld Flaws Impact Pipe Integrity*, **PHMSA data from 2006 to present demonstrates that Sunoco’s past and present record is to continue to operate leaking pipelines by hiding, masking, or downplaying the significance of leaks rather than disclosing and remedying the situation.** Sunoco’s abysmal operating record is discussed in more detail in Section 5.3.3, *Leak and Spill Detection and Response*.

The *Envy Report* also discusses the consequences of a leak in terms of soil contamination and problems with the bore hole that could compound the problem when combined with faulty welds.²⁸³ These elements are also given more discussion in Section 5.3.3, *Leak and Spill Detection and Response*.

²⁸² *Id.*

²⁸³ *Id.* at 14.

SOIL CONTAMINATION

“Subsurface pipeline leaks occurring 92 feet below, and in the HDD bore of Lake Oahe, would be complicated if not impossible to clean up and likely would have significant impacts on soils and the Hall Creek and Fox Hills aquifers underlying Lake Oahe. The depth of the contaminate would likely make clean-up of contaminated soil impossible. Contaminants in the soil from any leak or spill could easily travel from 92 feet below the surface to the freshwater Hall Creek and Fox Hills aquifers present below Lake Oahe and located just above the proposed HDD tunnel. The Hell Creek and Fox Hills formations are the major aquifers in the state and many residents depend on these formations for the water usage. These are also regional aquifers for not only North Dakota but also other surrounding states.”²⁸⁴

The *Envy Report* also elaborates on the increased risk for soil contamination rises as when the construction safety and mitigation measures are poorly analyzed in the EA:

*“The EA does not specify mitigation measures or specific pre-construction and construction prevention actions that would be implemented in a Spill Prevention, Countermeasure and Control (SPCC) Plan in the event of a leak in the HDD bore. The Envy Report also noted that the EA did not adequately address how contaminants would travel up and through naturally occurring geological cracks in the Hall Creek and Fox Hill formations; thereby, allowing shallow fluids to intermingle in the 92-foot-wide zone between the lake and the horizontal HDD bore area. Ninety-two feet is an insignificant distance for fluids to travel over time. Naturally occurring thermal stresses from ground/lake freezing, typical of the Missouri River and reservoirs, can also exacerbate the conditions by creating additional fluid communication channels for contaminants from the leaking pipeline to enter the Hall Creek and Fox Hill aquifers, and ultimately, Lake Oahe.”*²⁸⁵

The *Envy Report* further points out that drilling a bore hole is not a simple matter of a straight-line going from point A to point B because it can become quite problematic because the drill bit moves in a side-to-side and up-and-down direction, particularly as the bore travels over long distances, such as beneath Lake Oahe.²⁸⁶

BORE HOLE INTEGRITY AND GEOLOGICAL HAZARDS

“HDD considerations must include its application in the context of pipeline safety. Pipeline safety is directly proportional to the length, diameter, and weight of the pipeline. The geological conditions as well as the straightness of the original bore hole are also important safety factors that must be considered. Based on our experience in the field and the existing information globally and in North America, we are confident in saying that **the longer the HDD, the higher the risk.**

Construction technologies and methodologies used to construct the initial small-diameter pilot bore hole do not actually result in a point-to-point, straight-line hole, in part, because the bore hole requires the HDD drill bit to

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ *Id.*

navigate two curves in the pipe as it bends down from the higher elevation entry bore site, then horizontally across Lake Oahe before turning upward to the exit bore site. The resultant bore holes behave more like long cork-screw that also 'dolphins' up and down, as well as left and right. The same HDD steering technology is usually applied to shale or coalbed methane oil and gas production wells. Actual observed results have shown the HDD bore hole centerline to move vertically and horizontally by as much as 20-30' before the directional driller is even made aware that the drill bit has strayed from the intended tracking and correction is made to bring it back. Rather than a straight line, one could liken the boring to be more like an uncontrolled squiggle that more closely resembles an uncontrollable corkscrew moving vertically, horizontally as well as rotationally. This is not a result of poor drilling practices; rather, it is an accepted variance of the technology.

When the 12-3/4" horizontal bore hole is eventually reamed out to 48" diameter, the reamed hole will also follow the same non-linear centerline of the original bore hole resulting in a non-linear hole as described above. The excessive clearance between the 30" pipeline and the 48" reamed hole is intended to be the mitigation measure to allow the pipeline to slide in unobstructed by the walls of the bore hole. However, this mechanical variance in the hole's centerline because of the limits on steering control, compounds when considering the geologic hazards present in the bore hole. Clays in the bore hole are subject to swelling and sloughing and are likely to compromise bore hole integrity, even where the appropriate drilling muds are deployed to mitigate this. Compromising bore hole integrity creates higher risk conditions for the construction and operation of the pipeline due to the increased potential for caving and the presence of swollen clays. And compromised bore hole integrity due to the hazards present under natural geologic conditions further reducing pipeline safety by increasing stress calculators (e.g., stress and force) on the pipeline and along stress-risers.

Envy experts assumed that DAPL incorporated centerline stabilizers installed on the pipeline so that the pipeline would stay near the centerline of the bore hole and not drag on the sides (top, bottom, or sides) of the bore hole. It is impossible to keep the stabilizers from contacting the open bore hole but the pipe itself should 'theoretically' be kept from contact with the open bore hole. In practice, due to the issues raised above, the pipeline will also drag along some of the bore-hole surfaces during installation. Stabilizers and the pipeline itself may scrape the open bore hole causing further damage to both the pipeline and bore-hole during construction. In other situations, the entire pipeline could get stuck in the bore hole. While it is possible to eventually get the pipeline moving again, the **initial forces to break the pipeline free will be another incredible force that cannot be accurately calculated and modeled to ensure a safe pipeline design. This is one of the most significant construction risks with the potential to leave the pipeline unsuitable for use, even though the pipeline is eventually freed and completed.**²⁸⁷

²⁸⁷ *Id.* at 15.

The *Envy Report* discussion on HDD concludes that ET failed to consider the unique geological and subsurface construction risks under Lake Oahe and should have more seriously considered a route that avoided Lake Oahe:

“Considering the potential damage to the pipeline during the construction of the long horizontal section under Lake Oahe, together with the long-term operational risks stated above, we believe that DAPL and its principal, Energy Transfer Partners (ETP), have not fully and sufficiently evaluated the range of geologic and subsurface hazards factors that would likely preclude the proposed Lake Oahe crossing in favor of using a less risky route alternative.”²⁸⁸

05.2.2 Pipeline Routing Across Lake Oahe and Alternative Routes

This section discusses the three major deficiencies in the DAPL route selection process. The Tribes’ technical experts and advisors initially began identifying these deficiencies in 2015. The DOI, EPA, and the Army Corps during the Obama administration echoed the very same concerns during the Draft and Final EA comment periods in 2015 and 2016, while reiterating their concerns in a series of memoranda and opinions in 2016 and early 2017.²⁸⁹

The Army Corps must now address and analyze these deficiencies in the EIS. The three major deficiencies are:

- + Route selection methodology and analysis is unsubstantiated.
- + Feasible alternatives have not been properly considered.
- + Environmental justice considerations in route selection are lacking.

Part of the current challenge going forward with the EIS is that the D.C. District Court has previously ruled the Army Corps “substantially complied” with NEPA, including going to great length in discussing agreement with the route selection analysis.²⁹⁰

Judge Boasberg writes:

“Standing Rock believes that the Environmental Assessment lacks an adequate consideration of such alternatives. Specifically, the Tribe posits that the EA did not appropriately examine an alternative route that would have had the pipeline cross the Missouri River further north (citation omitted). The Court disagrees: on this front, the EA adequately discharged the Corps’ NEPA obligations....This is not to say that the EA’s analysis of the Bismarck

²⁸⁸ *Envy Report* at 15.

²⁸⁹ Philip Strobel, EPA Director of NEPA Compliance and Review Program, Office of Ecosystems Protection and Remediation. Letter to Brent Cossette, U.S. Army Corps of Engineers Omaha District. Ref: 8EPR-N. (Jan. 8. 2016). Available at: https://www.epa.gov/sites/default/files/2016-11/documents/dakota_access_pipeline_dea_cmts_1-8-16.pdf (Accessed on June 19, 2021); Philip Strobel. Letter to Brent Cossette (March 11, 2016), Available at: https://www.epa.gov/sites/default/files/2016-11/documents/dakota_access_2nd_dea_cmts_3-11-16.pdf Accessed on June 19, 2021). Lawrence S. Roberts, DOI Acting Assistant Secretary - Indian Affairs. Letter to Brent Cossette, Army Corps of Engineers (March 29, 2016). Available at: <https://usace.contentdm.oclc.org/digital/collection/p16021coll5/id/2707>. (Accessed on: June 26, 2021); John M. Fowler, Executive Director, Advisory Council on Historic Preservation (AHP). Letter to Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works). (June 2, 2016). Available at: <https://turtletalk.files.wordpress.com/2016/01/achp-letter-6-2-16.pdf> (Accessed: June 27, 2021); Jo Ellen Darcy, Assistant Sec’y for Public Works, Dept. of Army. Letter to Chairman Dave Archambault II, Standing Rock Sioux Tribe; Kelcy Warren, CEO Energy Transfer Partners; and Joey Mahmoud, Exec VP, Dakota Access Pipeline (November 14, 2016). Available at: [https://www.usace.army.mil/Portals/2/Archambault_Chairman_Standing_Rock_Sioux_Tribe_Response_regarding_the_proposed_crossing_of_the_Dakota_Access_Pipeline%20-%202014%20Nov%2016%20\(002\).pdf?ver=StqBSiu3qf---GjgGafyzw%3d%3d](https://www.usace.army.mil/Portals/2/Archambault_Chairman_Standing_Rock_Sioux_Tribe_Response_regarding_the_proposed_crossing_of_the_Dakota_Access_Pipeline%20-%202014%20Nov%2016%20(002).pdf?ver=StqBSiu3qf---GjgGafyzw%3d%3d) (Accessed on: June 26, 2021); Hilary C. Tompkins DOI Solicitor General. Tribal Treaty and Environmental Statutory Implications of the Dakota Access Pipeline. Memorandum Opinion, M-37038 at 4. (December 4, 2016). Available at: https://www.eenews.net/assets/2017/02/21/document_ew_05.pdf.

²⁹⁰ *Standing Rock Sioux Tribe v. Army Corps of Engineers*. Case 1:16-cv-01534-JEB Document 239 at 43. (Jun. 14, 2017).

alternative is without flaws...And although the Bismarck route would have crossed PHMSA high- consequence areas that the Lake Oahe route does not, the Lake Oahe route also crosses high- consequence areas...²⁹¹ Despite these issues, by identifying and comparing several features of the two routes as described, the EA easily clears NEPA's hurdle requiring 'brief discussion' of reasonable alternatives."²⁹²

Though the court, on the one hand, has judged the Army Corps to meet its NEPA obligation for route selection, it's difficult, on the other hand, to understand how the route selection can be severed from the courts order to conduct an EIS that also must correct the deficiencies it found in the impact analysis pertaining to spill risks, environmental justice, and the Tribe's hunting and fishing treaty rights.

05.2.2.1 General Pipeline Routing Process

By the time a pipeline is proposed, the project has likely undergone years of mechanical and civil engineering work to evaluate potential routes and the potential size and location of the pump/compressor stations to move proposed volumes of oil through the pipeline. The project also must cover all the work related to the installation of the field devices that will support remote operation and safety control. In the past, pipeline routes were chosen largely through marking the start and end points on a map, using a ruler to draw a straight line between them to show the proposed route, and then adding necessary deviations from that line due to factors such as topography and other technical factors. The company would then seek permission for that route depending on its potential to cross tribal, state, federal, and/or private lands, accepting further deviations if required.

This "design first, seek permission later" approach in the U.S. and for most of the world, for that matter, is untenable for most pipelines; much less large ones like the DAPL. For what are now obvious reasons, proposed pipelines receive public increased attention and scrutiny because pipeline owners need to plan in a way that protects valuable and vulnerable cultural resources, important species of plants and animals, as well as their habitat, water, groundwater, soils, prime farmland, and a list of other resources. Additionally, communities that are affected by a pipeline route are concerned about potential impacts to their way of life, even if some of those communities welcome the economic spinoffs that may come from the development. Pipeline development and route planning must balance all impacts to find the best possible solution for all concerned.

Every pipeline presents its own distinct challenges, and no single routing approach can be applied to all projects. Pipeline diameter; type of product being transported; treaty, state, county, and township lands that the route will go through; presence of infrastructure; proximity to watercourses, spiritual and cultural sites; schools; roads; transmission lines; and airports all must be taken into consideration during the planning process.

Typical route planning design is a process that includes: using real-time aerial obtained from fixed-wing aircraft and satellite imagery, use of state-of-the-art camera and sensor systems, a team of highly experienced Geographic Information Systems (GIS) specialists and engineers who understand how to identify and build constructible routes by identifying all attributes and high impact areas prior to submitting the necessary applications and permissions,

²⁹¹ Final EA, at 94.

²⁹² *Standing Rock*, Document 239 at 46.

ground survey crews to “ground-truth” GIS-generated routes, and a team of real estate specialists to identify and manage ROW planning and, if necessary, acquisition (e.g. purchase or condemnation by “eminent domain”).

Most pipeline companies often contract with consultants (e.g., ERM, third-party contractor for the KXL and DAPL EISs) who have the capacity and capability to use computer-based modelling software. Many of these consultants utilize proprietary systems using GIS data sets including wildlife habitat, elements of human settlements (e.g., schools, highways), watercourses, geology, soils, and topography. In theory, the data is input into the GIS and then used to evaluate the environmental, social, and technical factors to evaluate the desirability of various options to find the best-fit solution.

Understanding and addressing environmental, social, economic, and technical risks involves steps that include the following:

Researching constraints and opportunities: A “one size fits all” approach to pipeline routing is simply not feasible because every project is different in terms of terrain, location, the environment, environmental justice issues, and schedule. Quantifying impacts and weighting variables appropriately either make or break the effectiveness of GIS technology – thus ensuring that the route selected is the safest, most profitable, and environmentally sustainable option available or one challenged for the lack of transparency, profits at all costs, and the everyday variety of tone deafness. The concepts of environmental justice and the right to free, prior, and informed consent is for many pipeline companies and their consultants so poorly understood. This poor understanding happens despite legal protections and regulatory obligations.

The process starts with learning. Pipeline planners consider a wide range of data including topography, existing infrastructure, human habitation, known ranges of animals (particularly those that are federally or state threatened or endangered, or at risk), habitat that supports those species, and locations of cultural or economic significance to people in the area.

Values are assigned to each of these factors – a wetland might be indicated as a low, medium, or high value constraint, or potentially a complete “no-go” area for the pipeline route.²⁹³ “Attractions” for the pipeline are also considered. For example, the line might be run through areas that have already been impacted by development so that pristine land would not need to be disturbed. For federal agencies, pipelines that are “co-located” adjacent to existing pipelines are a high priority because of the perception that the new project would result in minimal additional disturbance. The process can include input from a team of multi-disciplinary subject-matter experts combining their respective knowledge and arriving at consensus. **However, there is no agreed upon “values” of certain factors, which often leads to GIS models using biased or arbitrarily weighted values.**

- 1. Networking together the possibilities:** From that information-gathering stage, it is possible to develop not just a single proposed pipeline route, but a network of feasible routes. Each segment of that network meets at nodal points on the map, making it possible to assemble a best-possible route combining segments of the network. The objective is to maximize the “optionality” – the generation of a wide range of options, partly to demonstrate to all involved that every practical alternative has been considered, and to allow the best combination of segments to emerge.

²⁹³ *Envy Report* at 30. *Technical and Safety Assessment, Routing, Construction, and Operation of the Dakota Access Pipeline in North Dakota*. Report prepared for the Cheyenne River Sioux Tribe. (Jan. 5, 2016).

2. **Data gathering and information sharing:** The data gathering and information sharing step is an informal, yet critically important community engagement step on which pipeline project proponents often place too little value and too little respect. The DAPL is a primary example of this.

Pipeline companies frequently spend years planning projects but fail to engage in a respectful and transparent manner to share information with affected communities,

Those communities where engagement is critical include a wide range of wildlife, law, tribal, and engineering experts that not only demand, but also have a basic human right to require that companies take community feedback seriously while also gathering and openly sharing critically important data with these communities to help ascertain constraints. At its core, this step is the basis for free, prior, and informed consent (FPIC), where for example considering impacts on tribal communities or any economically, socially, or environmentally disadvantaged and sensitive communities is not only essential, but a legal obligation.

For clarity, **this level of engagement is not a substitute for the separate and formal tribal government-to-government consultation and is not a substitute for the legal and policy obligations that a federal agency has with Tribes under Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*.** When it comes to formal consultation, pipeline companies are deeply in the dark in their understanding of Tribe's constitutionally protected treaty rights as sovereign nations. As one example, most pipeline companies – albeit most federal, state, and local politicians and bureaucrats within government – are unaware that aside from valid treaty rights, tribal chairs and presidents are accorded the same status as that of any other leader of a sovereign foreign nation outside the U.S. Meetings with tribal governments demands that corporate executives with demonstrated decision-making power engage and meet tribal leaders as one would accord any other leader of a sovereign nation or CEO of a corporation.

Data gathering and information sharing can and may be incorporated as part of an agency's formal consultation process, but in this critical planning step it refers to direct one-to-one engagement. By openly seeking to acquire and share important data sets and other critical baseline information, a pipeline proponent and a Tribe can be on equal footing to better assess potential routes before a federal agency becomes involved. One caveat is that as sovereign nations, a Tribe may or may not choose to engage with a company until formal consultation is initiated given the obvious historic misunderstanding, disregard, and disrespect to tribes and the mistrust it has wrought. Engagement is also not to be taken by companies as endorsement. Tribal leaders have a duty first and foremost to protect their nation's sovereignty and their people's well-being. Even with engagement, Tribes can be expected to oppose any projects that threaten its long-term viability and maintain rights to self-determination.

In the U.S. and Canada, some Indigenous communities have sophisticated GIS systems of their own that include Indigenous knowledge about the historic ranges of animals, locations of medicinal plant species, and sacred sites. Many more Indigenous communities lack the resources and training to create and maintain extensive databases. Other communities simply have no interest in that level of technology. Whether a Tribe has sophisticated planning tools at their disposal or not is, however, irrelevant. And some level of direct and respectful engagement will always be necessary. The information-gathering stage is also that

when there is scientifically valid information about factors such as wildlife range and habitat for which tribes hold treaty rights, the discussion can be based on factual data rather than well-intentioned but uninformed opinions. By the same token, many consultants lack the understanding to appreciate oral history traditions, and often view this information with a degree of cynicism. Part of respectful engagement is an understanding that whether or not a Tribe uses sophisticated database management tools, the decision to share information with non-tribal members or non-Indian people is dependent on certain cultural and spiritual practices that are protected religious rights guaranteed under the American Indian Religious Freedom Act (AIRFA).²⁹⁴

In many parts of the world, this engagement helps but does not meet the current legal definitions and requirements for early and meaningful consultation with rights holders and stakeholders. “Early” means that the consultation must take place at the start of the process before decisions are made, and “meaningful” connotes that project proponents must be able to show that community concerns were factored into the development plans.

3. Looking for the “win-win”: Pipeline companies often look at the data gathering and consultation process from the point of view of finding a way to provide “added value” to communities. This might include restoring traditional habitat of species or improving spawning habitat for fish. It might include economic spinoffs, such as altering an access road for the pipeline so it can serve the needs of the community or dividing off pieces of the construction work, so it is accessible to locally- or Indigenous-owned construction firms. This is typically a strategy that is used in Canada with First Nations to gain local support and one that U.S. pipeline developers are using more and more. This sort of strategy is, however, often utilized by companies as public relations where their projects are or may be opposed. In the case of the DAPL, ET/Dakota Access made numerous financial donations to local first responders in and around Bismarck, ND, and Burleigh County. The University of Mary was a recipient of a \$5 million donation from ET CEO Kelcy Warren’s ET/Sunoco Foundation in 2018 and in 2019 made a substantial donation to open a vocational center in Flasher, ND.²⁹⁵

Sometimes companies such as TransCanada and Enbridge pitch pipelines as an opportunity for major improvements to a remote community’s life, such as routing the main pipeline close enough to human habitation that it is practical to extend a small-diameter line to carry gas to the community. While in some remote communities of color and First Nations in Canada and reservations in the U.S., energy is generated through costly and polluting diesel engines, companies have promoted “added value” by offering to make natural gas available. While these opportunities can bring about significant improvements in lifestyle for remote communities, for example making it practical to build community cultural and recreation centers, medical facilities, and manufacturing businesses, Native and other disadvantaged communities must carefully weigh the risks to resources, such as surface water, wetlands, and groundwater.

294 Public Law 95-341 and 103-44. See: <https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg469.pdf> and <https://www.congress.gov/bill/103rd-congress/house-bill/4230/text>

295 Energy Transfer/Sunoco Foundation and Energy Transfer Partners donate \$5 Million to the University of Mary (April 20, 2018). Available at: <https://news.umary.edu/energy-transfer-sunoco-foundation-and-energy-transfer-partners-donate-5-million-to-the-university-of-mary/> (Accessed on: June 11, 2021); Energy Transfer Partners makes largest donation ever to University of Mary capital project. Bismarck Tribune (April 20, 2018). Available at: https://bismarcktribune.com/news/local/bismarck/energy-transfer-partners-makes-largest-donation-ever-to-university-of-mary-capital-project/article_c2c7f71e-03bf-5ad2-9e4d-08b45e010029.html (Accessed on: June 11, 2021); Vocation center to open in Flasher in fall. Bismarck Tribune (March 31, 2019). Available at: https://bismarcktribune.com/news/local/vocational-center-to-open-in-flasher-in-fall/article_69a6abcf-cc8e-5a6e-93dc-3969582cd8c0.html (Accessed on: June 11, 2021).

Pipeline companies understand that “community projects” may add to the pipeline’s cost, but it may be well worth the “investment.” Running a feeder pipeline off the mainline to supply gas to a community, plus support of the infrastructure to use that gas, might add costs in the range of \$10 million – a lot for a small community, but the equivalent of perhaps about two miles of pipeline. Gaining the community’s support, and demonstrating goodwill, may be well worth the cost from the pipeline company’s viewpoint.

Computer-based option analyses go a long way toward strengthening the way decisions are made in today’s environment, as methodologies and procedures now exist that can account for a wide range of viewpoints and knowledge to evaluate a maximum number of possibilities, then narrowing down those possibilities using agreed-upon criteria. The new types of inputs could lead to a paradigm-shifting route planning process in which all rights holders and stakeholders’ views and interests have been considered and factored into the result. As the DAPL EA and EIS process has demonstrated, the oil and gas industry is an industry steeped in colonialism and racism that is not only slow to embrace change in the kinds of engagement it does, but at most times the industry is visibly resistant to it.

05.2.2.2 DAPL Routing “Process” – Problematic for the EIS

Throughout June 2014, Dakota Access began holding project kickoff meetings with various state agencies including SHPOs and state Fish & Wildlife Management Agencies, the Army Corps, and USFWS to discuss its DAPL proposal.²⁹⁶ The \$3.78 billion project was announced to the public on June 25, 2014, and informational hearings for landowners took place between August 2014 and January 2015.²⁹⁷ On December 22, 2015, the company filed their Application for Corridor Compatibility and Route Permit to NDPSC showing that they had selected the route crossing Lake Oahe (**Figure 5-8**), but omitting tribal reservations on their ND project map submitted in the application (**Figure 5-9**) as was done in the Draft EA (*Compare Figure 3-3*. DAPL Draft EA project location map with tribal reservations omitted, 2015.). The NDPSC application included a consultation appendix, Exhibit F.” A search of the appendix found no correspondence or mention of the SRST or any Tribes.²⁹⁸ This is a striking omission.

A FAILED ROUTE SELECTION ANALYSIS

In the Final EA, DAPL and the Army Corps outlined their route selection modeling methodology by giving a general and impossibly unverifiable explanation that they also expected the public and the Tribes to accept *ad nauseum*:

“Although this EA is limited to the pipeline placement on federal real property interests administered by the Corps, major route alternatives were evaluated for the pipeline route. During the DAPL Project fatal flaw analysis and early routing process, Dakota Access utilized a sophisticated and proprietary Geographic Information System (GIS)-based routing program to determine the pipeline route based on multiple publicly available and purchased datasets. Datasets utilized during the Project routing analysis included engineering (e.g., existing pipelines, railroads, karst, powerlines, etc.), environmental (e.g., critical habitat, fault lines, state parks, national

²⁹⁶ See: https://en.wikipedia.org/wiki/Dakota_Access_Pipeline#cite_note-etp25062014-7 (Accessed: June 1, 2021).

²⁹⁷ Energy Transfer Announces Crude Oil Pipeline Project Connecting Bakken Supplies to Patoka, Illinois and to Gulf Coast Markets. Businesswire (June 25, 2014). Available at: <https://www.businesswire.com/news/home/20140625006184/en/Energy-Transfer-Announces-Crude-Oil-Pipeline-Project>. (Accessed on May 12, 2021).

²⁹⁸ Dakota Access LLC. Exhibit F. Agency Consultation. Application for Corridor Compatibility and Route Permit, North Dakota Public Service Commission. (Dec. 22, 2015). Available at: <https://psc.nd.gov/database/documents/14-0842/001-110.pdf>. Accessed on May 11, 2021.

forests, brownfields, national registry of historic places, etc.), and land (e.g., fee owned federal lands, federal easements, dams, airports, cemeteries, schools, mining, tribal lands, and military installations, etc.).

Each of these datasets was weighted based on the risk (e.g., low, moderate, or high based on a scale of 1,000) associated with crossing or following certain features. In general, the route for the pipeline would follow features identified as low risk, avoid, or minimize crossing features identified as moderate risk, and exclude features identified as high risk. For example, the existing pipelines dataset was weighted as a low-risk feature, so that the routing tool followed existing pipelines to the extent possible to minimize potential impacts. An example of a high-risk feature is the national park dataset. Since national parks were weighted for the DAPL Project as high risk, the GIS routing program excluded any national parks from the pipeline route to avoid impacts on these federal lands. In addition, the routing program established a buffer between the proposed route and certain types of land, such as maintaining a 0.5-mile buffer from tribal lands.”²⁹⁹

The Army Corp’s route selection analysis relied heavily on **Tables 2-1** (*Alternatives Evaluation Matrix Between Preferred Crossing at Lake Oahe and Alternative Crossing North of Bismarck*) and 2-2 (*Construction Cost Comparison Between Crossing at Lake Oahe and Alternative Crossing North of Bismarck*) of the Final EA to justify the route for DAPL, using a subjective and arbitrary ranking of key elements.³⁰⁰ However, beyond the basic ranking description quoted above, there was virtually no detailed explanation of the methodology for ranking these elements, including details on how these elements were chosen to be incorporated in the route selection model in the first place.

The Final EA also states that sixty data sets were used and that the “ranking system” was based on “a scale of 1,000,” an unclear and unsubstantiated ranking system (See EA Table 2-1 at p. 9-11).^{301,302} Furthermore, the criteria utilized to assign weights to the various features in the GIS analysis lacked substantive explanations. While a “0 – 1000” ranking system seems on the surface to be diligent, elements were merely attributed rankings of 0, 500, and 1000. As shown in EA Table 2-1 of the Final EA, the Army Corps and Dakota Access employ a simple mathematical calculation that merely sums the arbitrary and unsubstantiated rankings attributed to each element to determine that the route across Lake Oahe was the more preferable pipeline route.

Choosing to limit model inputs to sixty data elements is a narrow and highly subjective decision when the publicly accessible North Dakota GIS Hub Data Portal, an open-source data platform, contains over 500 datasets provided by 13 North Dakota state agencies. As an example, Dakota Access inexplicably used “national parks” as an element in their route selection analysis. A quick Google search of national parks indicates the closest national park is Theodore Roosevelt National Park, approximately 133 miles west of Bismarck, ND and 20 miles south of Watford City, ND. Watford City is located on the west end of the DAPL in

²⁹⁹ U.S. Army Corps of Engineers, Final Environmental Assessment and Mitigated FONSI at 7. Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands. (July 25, 2016).

³⁰⁰ *Id.* at 9-11.

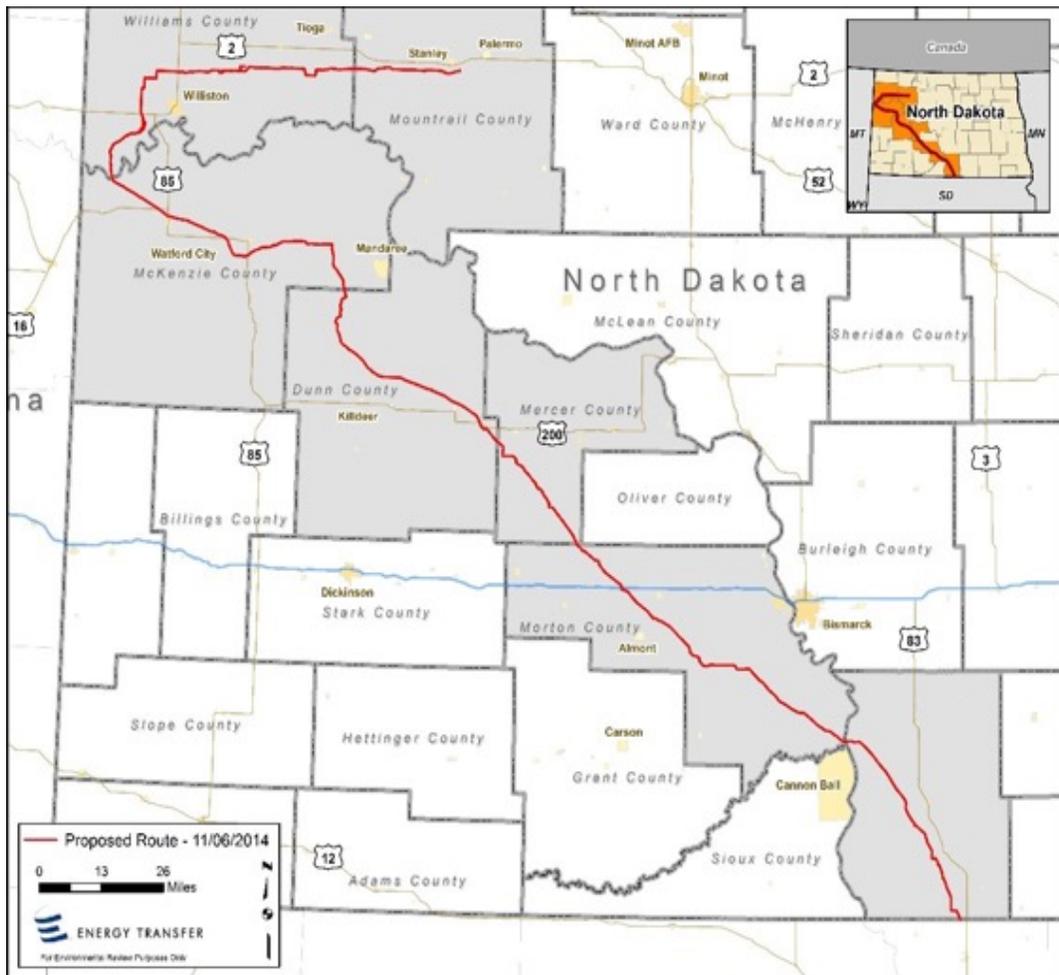
³⁰¹ *Id.* at 9-11.

³⁰² U.S. Fish and Wildlife Service, Final Environmental Assessment; Grassland and Wetland Easement Crossings, Dakota Access Pipeline Project, Appendix A. (May 2016).

» Figure 5-8. Aerial view of Dakota Access LLC's proposed Lake Oahe crossing from their NDPSC application, 2014.



» Figure 5-9. DAPL area map in NDPSC application excluding tribal reservations, 2014.



McKenzie County near the DAPL; however, it is difficult to fathom why the DAPL chose to input Theodore Roosevelt National Park.

Regardless of the route alternative selected, the DAPL would have no direct, indirect, or cumulative impact on a sensitive natural element that is at least 20 miles away. By comparison, the route selection model ignored the Standing Rock Sioux Reservation and the natural resources on which the Tribes are dependent, even though the Reservation's northern boundary lies 0.55 miles away. Without justification, the EA also pointed out that water intakes 7.6 and 11.6 miles downstream from two populated municipalities, Mandan and Bismarck respectively, were also excluded from the Bismarck route analysis.

After the spatial datasets were compiled, the dataset list should have been reviewed in consultation with the Army Corps and the Tribes during the early part of the consultation process to ensure all relevant spatial information had been accounted for and was a true and representative collection of the constraints (risks) and opportunities (benefits) present within the broad geographic area that encompassed the potential pipeline alternatives.

The next step should have been to assess each spatial dataset and clearly identify an agreed-upon risk or benefit value, weighting each appropriately, and then deciding what an appropriately sized buffer would be suitable to best represent the element or feature. Typical benefit and risk values are assigned using a ranking scale: high benefit (1); medium benefit (2); low benefit (3); low risk (4); medium risk (5); and high risk (6). An applied rating, unlike the arbitrary and unsubstantiated methods used, would have better indicated, and informed the relative risk (i.e., constraint) or benefit (i.e., opportunity) of a dataset in relation to the project's objective and the physical project area.

Within each spatial dataset, it is also often necessary to separate different categories of data that have different levels of risk or benefit based on their relative sensitivity. For example, within the wetland dataset, there may be several different categories. Therefore, within the one spatial dataset, there may be two, three, or more separate subsets which are used as input into the spatial analysis. In other instances, the same risk or benefit ranking can be applied to the whole dataset. These critical attributes were seemingly ignored in the route selection analysis Dakota Access conducted and submitted to the Army Corps. **The Army Corps blindly accepted Dakota Access' analysis in the EA without any record of scrutiny.**

The Final EA also stated, "the company carefully considered possible route alternatives in the EA."³⁰³ It cannot be overemphasized that the Final EA failed to disclose the methodology used to weigh the narrow set of attributes used to conduct the route selection analysis. **The analysis also failed to substantiate how conclusions were reached beyond using a simple mathematical calculation. The decision about the most preferable route was based on a simplistic summing up of the arbitrary ranking of attributes about routes.**

In summary, the Tribes' technical analysis of the EA has substantiated that Dakota Access merely used a model inputting a broad set of poorly and arbitrarily weighted elements. The Army Corps did little to scrutinize the model, the attributes used, the method used to rank and/or weight those attributes, or the arbitrary conclusions reached about the preferred route and its rejection of the route 10 miles north of Bismarck, ND.

The Army Corps' *Analysis of Issues* rejected and side-stepped the idea of route analysis "because the basis for the route selection relied on in the Final EA is not at issue in this

³⁰³ U.S. Army Corps of Engineers, Final Environmental Assessment and Mitigated FONSI at Appendix J 1 of 19 (Table). Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands. (July 25, 2016).

remand.”³⁰⁴ The Army Corps did, however, go to great length near the very end of their remand report to put the route selection issue to bed. The SRST commented that:

“A robust geo-processing suitability model is necessary to determine the best route for a pipeline, or any linear transportation facility.”
SRST Comments at 65-70.

*RESPONSE: “The Corps evaluated reasonable alternatives to ETP’s preferred crossing based on the Corps’ limited jurisdiction over the portion of the pipeline that crossed federally-owned Corps managed land. Final EA at 5-22. SRST preferred a geo-processing suitability model but did not specifically identify any flaws in the data or methodology used in the Corps’ alternatives analysis evaluation. SRST generally commented that it did not favor the process ETP followed in examining and ranking datasets, but SRST did not provide any scientific evidence or the results of a geo-processing suitability model for the Corps to consider and that would cause the Corps to doubt its previous methodologies and data supporting the Corps’ conclusion on the alternatives analysis. Therefore, this comment does not show that a substantial dispute exists as to the size, nature, or effect of the major federal action.”*³⁰⁵

Rather than discuss the issue raised about the data sets and arbitrary ranking, the Army Corps chose to deflect the issue by trying to suggest that the burden of proof was on the SRST to put forth and present alternative models and methodologies to conduct route selection (See Section 5.2.4.5 for further discussion on the DAPL, environmental justice, and the “Precautionary Principle”). **While this should have been countered in 2018, the Tribes’ legal counsel failed to do so, allowing the Army Corps to respond in a manner much more akin to what would be expected from an agency following the Trump era NEPA rules.**

PHMSA HIGH CONSEQUENCE AREAS, RISK, AND ROUTE SELECTION

The Army Corps’ and Dakota Access’ lack of logic was captured best in the quote that begins Section 5 of this report. DOI Solicitor Hilary Tompkins reasoned – as had the Water Protectors, Tribes, the technical team, and the Tribes’ attorneys – if the Army Corps and Dakota Access truly believed that the DAPL is one of the safest, most technologically-advanced pipelines in the world, with a near-zero potential for leaks or spill: “Why was the Bismarck route alternative rejected?”³⁰⁶

While a route selection model should consider factors like PHMSA “high consequence areas” (HCAs) and threatened and endangered species (e.g., bald eagle and piping plover), the Army Corps ultimately rejected the Bismarck route, “due in large part to its proximity to a central municipality and to “multiple conservation easements, habitat management areas, National Wildlife Refuges, state trust lands, waterfowl production areas, and private tribal lands.”³⁰⁷ The Army Corps further stated in the Final EA that the Bismarck route “crossed other populated PHMSA high consequence areas (HCAs), that are not present on the preferred route (Lake Oahe).”³⁰⁸ The Army Corps further sought to “minimize[sic to] impacts on sensitive resources

304 Army Corps. *Analysis of Issues* at 83.

305 *Id.* at 136.

306 Hilary C. Tompkins, DOI Solicitor. Memorandum Opinion, M-37038, (“M-Opinion”) (Dec. 4, 2016).

307 U.S. Army Corps of Engineers, Final Environmental Assessment and Mitigated FONSI. Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands at 7-8. (July 25, 2016).

308 *Id.* at 8.

(e.g., piping plover critical habitat, eagle nests, etc.),³⁰⁹ as well as to completely avoid “high risk features” such as national parks.³¹⁰ The Army Corps continues to focus on those elements in close proximity to “several wellhead source water protection areas,” and thus determined that the agency should avoid that route so as “to protect areas that contribute water to municipal water supply wells.”³¹¹

The Army Corps’ reasoning becomes even more arbitrary and capricious in violation of NEPA because the EA spends considerable time over concerns about the safety of the Bismarck municipal water supply and relies heavily on that justification for its decision not to analyze the Bismarck route in detail. The Army Corps rather than conducting their risk analysis, relies on Dakota Access’ “risk analysis,” stating:

“While an oil spill is considered unlikely and a high precaution to minimize the chances has been taken, it is still considered a low risk/high consequence event. A risk analysis conducted by DAPL addressed nine industry-recognized pipeline integrity threat categories in combination with public and environmental impact that could occur in the event of a release into Lake Sakakawea and Lake Oahe. These threat categories include the following: 1) third-party damage, 2) external corrosion, 3) internal corrosion, 4) pipe manufacturing defects, 5) construction related defects 6) incorrect operations, 7) equipment failure, 8) stress corrosion cracking and 9) natural forces. DAPL derived the following analysis risk process from the W. Kent Muhlbauer Relative Index Methodology (2004), in accordance with 49 CFR 195.452 “Hazardous Liquid Pipelines in High Consequence Area”, API RP 1160 “Managing System Integrity for Hazardous Liquid Pipelines”, and ASME B31.8S “Managing System Integrity of Gas Pipelines”.³¹²

While Table 2-1 in the Final EA shows that the DAPL would cross 2.6 miles of “ecological HCA” for both the Lake Oahe and Bismarck routes, the deciding factor for the Army Corps was that the Bismarck route would cross 1.6 miles of “other populated” HCAs. The Army Corps further concluded that “while the [Bismarck] alternative does avoid Corps fee owned land at Lake Oahe; [and] therefore, would not require a Corps real estate outgrant [easement] or Corps EA review,” they based their decision to cross Lake Oahe based on Dakota Access’ determination that approximately 11-miles of length would be added to the [Bismarck] pipeline route, consisting of roughly 165 additional acres of impact, multiple additional road crossings, waterbody and wetland crossings, etc.”³¹³

On the surface, the Army Corps statement would seem to be one based on environmental concerns; the reality is that the selection of the Lake Oahe route as the preferred alternative was based on Dakota Access’ concerns. The Bismarck route would, as shown in Table 2-2 of the EA, cost the company \$32 million more than the Lake Oahe route.³¹⁴ Of the three major construction costs identified in Table 2-2 (93 percent of total estimated cost that includes non-HDD pipeline installation, rights-of-way acquisition, and additional engineering and other consultancies required), the difference between the two routes is only \$20 Million. The Army Corps and Dakota Access also only counted the number of wetlands crossed (29

³⁰⁹ *Id.*

³¹⁰ *Id.*

³¹¹ *Id.*

³¹² *Id.* at 92.

³¹³ *Id.* at 19.

³¹⁴ *Id.* at 11.

for the Bismarck route v. four for Lake Oahe crossing) but failed to account for the actual acreage of impacts to these wetlands. Additionally, it is unknown if the wetlands delineated by Dakota Access are jurisdictional wetlands under Section 404 of the CWA. Modern pipeline construction techniques also utilize HDD to bore under wetlands and/or pipeline alignments could be routed to avoid jurisdictional wetlands. The other unwritten part of the DAPL routing process is Dakota Access' desire to avoid condemnation and "takings" proceedings with private land from farmers, ranchers, and other landowners who might oppose the DAPL being routed through their deeded land, thus forcing Dakota Access to spend more money on attorneys in potentially protracted condemnation hearings and litigation.

As has been its *modus operandi* throughout history, the Army Corps' mistreatment of the Tribes is demonstrated again where their rationale for putting the pipeline at Lake Oahe is based on representations from Dakota Access, but with no input from the Tribes.³¹⁵ In reaching new heights of capriciousness, the Army Corps further reasoned that because of "the engineering design, proposed installation methodology, quality of material selected, operations measures and response plans the risk of an inadvertent release in, or reaching, Lake Oahe is extremely low."³¹⁶

And just when the EA couldn't have seemingly gotten any more contradictory, arbitrary, and capricious, the Army Corps concludes that because the "siting and construction of oil pipelines upstream of drinking water intakes is not uncommon throughout the United States," in the "unlikely event of a release, sufficient time exists to close the nearest intake valve to avoid human impact."³¹⁷ Thus the Army Corps' finding the DAPL is safe enough to protect the Standing Rock Sioux Tribe and the downstream Tribes, but not safe enough to protect Bismarck and Mandan is yet another example of the Army Corps' characteristically non-sensical and profoundly illogical reasoning that has been their hallmark throughout not only the DAPL's history but throughout its history of dispossessing and displacing the Oceti Sakowin from their traditional homelands.

The PDEIS attempts to tell a different story from the 2016 EA and Mitigated FONSI by pivoting completely away from using Tables 2-1 and 2-2 in the EA to convoluted and weak analyses of the impacts by focusing heavily on the many previously implemented and newly proposed mitigation measures that have allowed the DAPL to not only currently operate illegally but continue, albeit unproven measures the Army Corps has used to state that the risk of a leak is low.

The PDEIS shared with the Cooperating Agency Tribes (SRST, CRST, and OST) also was abysmally incomplete with dozens of "placeholders" and missing information as the contractor, ERM, inserted numerous comments indicating that those holes in the document would be incorporated in the Draft EIS.

The PDEIS' release frequency analysis further attempts to build the case for the current Lake Oahe route by using a broad-brush approach (aka PHMSA's "generic pipeline data") to dilute and obscure ET/Sunoco's abysmal safety record. ET/Sunoco's operational record is one of the top two of worst records in the industry when the data is properly teased part, as it has been by the SRST's technical experts (See, Section 5.2.3.1, They're Never the Worst One. But...). Rather than conducting a release frequency analysis that focuses on ET/Sunoco's record in the PHMSA data base, the Army Corps and its EIS contractor, ERM, attempts to minimize the

315 Tompkins at 26.

316 Final EA and Mitigated FONSI at 87.

317 *Id.*

abysmal operating record by stating, “the data specific to the DAPL is limited ...” and then without any supporting documentation that such a broad brush analysis is warranted, offer a more completely generic comparison by lumping ET/Sunoco in with the pipeline industry safety record as a whole.

The PDEIS goes on to assert, without a single professional citation that,

“The Project is considered to be better constructed than the average pipeline and is expected to have a lower release frequency than average. Generic data from pipeline releases from 2008-2019 trends to the industry average. Using generic data provided from PHMSA is considered to be conservative for this analysis because of the existing safeguards in place and modern pipeline design of the Project”

The PDEIS then attempts to further whitewash ET/Sunoco’s abysmal record by presenting a table (Table 3.10.4-1) “to summarize the cause and number of incidences from onshore crude oil pipelines from 2010-2020, for an average of 77,337 miles of operating onshore pipelines per year.”

We again refer the reader to SRST’s technical experts’ analyses that have deconstructed the Army Corps’ and ERM’s weak data analyses using very same PHMSA data, by focusing on the incidence and safety record of ET/Sunoco operated pipelines (Section 5.2.3.1, They’re Never the Worst One. But...They’re Never the Worst One. But...), as noted above. As discussed in Section 5.2.3.1, newer pipelines have a much higher risk of incidents than older pipelines and ET/Sunoco’s continues to be one of the worst in the industry. PHMSA as recently as June 2021 cited the DAPL for seven safety violations occurring from 2017 until well into 2019. We discuss this in Section 5.2.3.2, PHMSA Cites the DAPL for Significantly Dangerous Safety Violations.

THE FAILURE TO CONSIDER LANDSLIDE RISKS

The Army Corps also fails to seriously consider the risk of a serious landslide exists that could result in a rupture to the DAPL at the Lake Oahe crossing.³¹⁸ This contradicts the Final EA. The Final EA and the PDEIS relied on a gross-scale map developed by the USGS to illustrate the regional potential for the occurrence of landslides and was used by ET/Dakota Access Pipeline to evaluate landslide incidence and susceptibility.³¹⁹

Specifically, the Army Corps states,

“Portions of the Project Area within the Corps’ flowage easements are moderately susceptible to landslides.” (Final EA at 26).

Landslide factors were not attributed risk values in the route selection analysis and omitted as a dataset to better evaluate risks and constraints. This is a serious error in the route selection analysis. This is made more serious as the discussion regarding the risk of landslides is further downplayed in the Final EA and PDEIS. Those discussions largely focus on the potential landslide impacts from workspaces, while failing to address potential short- and long-term risks from a landslide that would result in a catastrophic spill:

“On the west side of Lake Oahe, 1.2 acres of the HDD workspace (exit point) and 13.1 acres of the pipe stringing area are designated as having a high

318 F. Perry H. Rahn, Ph.D., P.E. and Arden D. Davis, Ph.D. *Landslides in the Vicinity of the Dakota Access Pipeline Crossing of the Missouri River Near the Standing Rock Sioux Reservation*. Prepared for the Standing Rock Sioux Tribe (December 2017).

319 D.H. Radbruch-Hall, R.B. Colton, W.E. Davies, I. Lucchitta, B.A. Skipp, and D.J. Varnes. 1982. *Landslide Overview Map of the Conterminous United States*, USGS Landslide Hazards Program. Available at: <http://landslides.usgs.gov/hazards/nationalmap/>.

incidence for landslides. Additionally, the stringing area encompasses approximately 1.8 acres of land that is classified as highly susceptible to landslides. Approximately 0.9 acre within the stringing area has slopes exceeding 25%. Approximately 1.2 acres of the HDD entry point workspace on the east side of Lake Oahe is designated as having a high incidence of landslides, but there are no slopes within either the east or west HDD workspace that exceed 25%.”³²⁰

On page 122 of the *Analysis of Issues*, the Army Corps summarily dismissed landslide risks identified near the DAPL Lake Oahe crossing, in court filings. Appendix F to the *SRST Spill Report* provides an expert description and detailed analysis of the “serious risk” of landslides in this vicinity, contrary to the unsubstantiated assertions made by the Army Corps. The Army Corps’ *Analysis of Issues* failed to mention the SRST Appendix F report prepared by Dr. Perry Rahn (Emeritus Professor, South Dakota School of Mines & Technology) and Dr. Ralph Davis (Vice President of Research, SDSMT):

“The area of the crossing has landslide-prone geologic material from the exposed Fox Hills Formation. The Pierre Shale, which also consists of unstable material, is the bedrock directly beneath the Fox Hills Formation. The steep slopes and unstable soils at the crossing have resulted in landslides in the past. Numerous landslides from previous slope failures have been mapped in the area, and more are predicted to occur. Future landslides and reactivation of old landslides pose a serious risk of rupturing the pipeline.”³²¹

A NEW AND MARKEDLY IMPROVED ROUTE SELECTION ANALYSIS IS ABSOLUTELY NECESSARY

The Army Corps must incorporate not just landslide risks, but conduct a whole new and transparent route selection modeling and analysis in the EIS as they have failed to fully appreciate how significant it is to use reliable and far less arbitrary and capricious attributes while omitting other key attributes that would impact the Tribe’s treaty-protected hunting and fishing rights, has a high potential for disproportionately impacting the Tribe and its sole water source from a spill or leak, and a more robust analysis of factors that assess environmental injustices.³²² Such an analysis was not conducted for the PDEIS.

All environmental impact assessments (EIA) suffer from subjectiveness of some kind.³²³ However, subjectiveness is a real danger and occurs whenever the results and impact analysis are influenced by the subjective norms, values, and interests of one or more of the parties involved. This can be detrimental for the quality of an EA and EIS document, and only serves to make the project more controversial, thus a subjective impact analysis is then unlikely to improve decision making.³²⁴ Again, the PDEIS demonstrates that the Army Corps and its EIS contractor, ERM, fails to address any inherent bias to the DAPL by failing to adequately consider landslide risks.

The court’s judgement on the DAPL EA route selection “modeling” is erroneous and lacks a modicum of objectivity that should’ve been rejected. That the Army Corps and Dakota Access have rebuffed the Tribes’ experts’ repeated requests to provide the “proprietary” desktop

³²⁰ Final EA and Mitigated FONSI at 27.

³²¹ SRST. *Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux Tribe* (Feb. 21, 2018). Available at: <https://www.standingrock.org/PressReleases/>. (Accessed on May 29, 2021).

³²² *Id.*

³²³ Erik Mostert (1996) Subjective environmental impact assessments: causes, problems, solutions. *Impact Assessment*, 14:2, 191-213, DOI: 10.1080/07349165.1996.9725896. Available at: <https://doi.org/10.1080/07349165.1996.9725896>. (Accessed on: May 11, 2021).

³²⁴ *Id.*

model that Dakota Access purports to have used raises questions about how the Army Corps will continue to proceed with the alternatives analysis in the EIS. Thus far, PDEIS has not shown a new route selection analysis and the Army Corps continues to demonstrate its outright hostility toward the Tribes' technical team's demands for technical documentation, albeit route selection modeling or spill modeling. The Army Corps states:

"With respect to substance, and the determination of the impacts of an oil spill, the Corps relies upon an ETP/Sunoco "spill model" to justify findings of "no impact." Its treatment of this document, which has never been released publicly (or to the Tribe), reflects the approach taken by the Corps generally in the Analysis of Issues – misleading assertions, and bald conclusions based upon unverified assumptions and hidden documents."³²⁵

The one relief granted the Tribes is that – although the D.C. Circuit Court of Appeals reversed the lower court's order to shut down the pipeline – it rejected the Dakota Access and Army Corps appeals regarding sufficient spill modeling and the need for an EIS.³²⁶ If the PDEIS shared with the Tribes is any indication, there is certainty regarding the continued lack of transparency and hostility toward the Tribes surrounding the Army Corps' handling of the EIS. Despite stating otherwise, the Army Corps is proceeding in the EIS process as if under the new Trump era NEPA implemented on September 14, 2020, and not according to the NEPA regulations that preceded these reforms as the Army Corps stated they would in July 2021. The alternative selection and subsequent impact analyses shown in the PDEIS is stacking up to be just as subjective as the EA and remand analysis before it. And with it will come the necessary legal challenges from the Tribes and their allies when the Final EIS and Record of Decision (ROD) are issued, presumably in September 2022.

05.2.2.3 Comparison of Construction Costs for Route Alternatives

As with Table 2-1 of the Final EA (*Alternatives Evaluation Matrix Between Preferred Crossing at Lake Oahe and Alternative Crossing North of Bismarck*), Table 2-2 (*Construction Cost Comparison Between Crossing at Lake Oahe and Alternative Crossing North of Bismarck*) relied heavily on a simplistic mathematics using a simplistic summation (e.g., "1 + 1 = 2") of comparative construction costs, but failed miserably at quantifying social and environmental costs to either the Tribe or other potentially impacted communities in the event of a spill.³²⁷ Section 5.2.2.3 discusses the *Envy Report* cost analysis which challenged the Army Corps' cost analysis used in the Final EA to justify the selection of the route crossing Lake Oahe. Notably, the rudimentary cost analysis was omitted from the PDEIS. Not only should the Army Corps include a revised cost analysis in the forthcoming EIS, but it should not be reliant on such rudimentary methods as demonstrated in the Final EA.

If the PDEIS is again any indication, the Army Corps continues to avoid seeking any new information while also either continuing to rely on the Final EA or eliminate previous information in the EA altogether to substantiate leaving the DAPL in place at the Lake Oahe crossing as the preferred alternative. The revised NEPA regulations do permit the Army Corps to rely on older, previously produced data. The PDEIS makes it clear that

³²⁵ SRST Remand Report at 23.

³²⁶ *Standing Rock*, Case No. 20-5197 (D.C. Cir. Jan. 26, 2021).

³²⁷ Standing Rock Sioux Tribe and Standing Rock Sioux Tribe Technical Team. *Report Addressing Deficiencies in the Corps of Engineers' Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe* at 73 (Feb. 5, 2019).

impact analysis is subjective, arbitrary, and capricious in violation of the NEPA regulations the Army Corps purports to be following.

Like the route analysis, the Army Corps justified rejecting the Bismarck alternative on an unsubstantiated construction cost comparison. The cost to build the Bismarck route was estimated to be \$33 million more expensive (\$255,122,888 vs. \$232,556,008) based on *Dakota Access' estimate* that the DAPL would be 11 miles longer than the Lake Oahe route and require 165 more acres of disturbance, more than 11 additional floodplain crossings, a powerline, and 27 additional transportation crossings.³²⁸

Dakota Access' construction cost estimate in the Final EA lacked substantive analysis or discussion. The *Envy Report* took that analysis to task for not only limiting their evaluation to the Bismarck ("Alternative 3") and Lake Oahe ("Alternative 2") routes, but for failing to include a third but viable route that avoided crossing the Missouri River ("Alternative 1") altogether.³²⁹ Though the analysis did not benefit from the same data sets Dakota Access used, the *Envy Report* analysis was able to make a reasonable estimate based on widely available, but relatively consistent global construction costs estimates (2015-2016).

Table 5-2 (Major construction and engineering parameters for three viable DAPL route alternatives) and Table 5-3 (Construction cost comparisons for three viable DAPL route alternatives) are adapted from the *Envy Report*. The *Envy Report* estimates and indicates that the route alternative avoiding the Missouri River would be 245 miles long, or 20 and 24 percent shorter, when compared to the Lake Oahe (309 miles) and Bismarck (322 miles) routes, respectively. While the *Envy Report* construction cost estimates for the Lake Oahe (\$682,971,642) and Bismarck (\$710,523,844) are 178 and 193 percent higher than the figures Dakota Access estimated in the EA, on a relative cost basis Alternative 1 was by comparison 21 and 24 percent less expensive than the Lake Oahe and Bismarck routes, respectively.

328 Final EA and Mitigated FONSI at 10-12.

329 *Envy Report* at 30-37.

Table 5-2. Major construction and engineering parameters for three viable DAPL route alternatives.

Description	Route		
	Alternative 1 East of Missouri River	Alternative 2 Crossing at Lake Oahe	Alternative 3 Crossing 10 miles north of Bismarck
Total number of road bores required¹	28	11	Crossing 10 miles north
Total miles of pipe installed for non-HDD areas	245	307.3 ²	320.62
Total feet of horizontal directional drilling along pipeline route	0	7,500 ft. at Lake Oahe 1,400 ft. at Missouri R. in Williams County Total HDD length:8,900 ft.	5,966 ft. at Lake Oahe 1,400 ft. at Missouri R. in Williams County Total HDD length:7,366 ft.
Total miles of route requiring geotechnical investigation	245	309	322
Total number of mainline valves required (~one valve assumed per each 10-mile segment)	25	31	33
Total miles of pipeline requiring right-of-way acquisition	245	309	322
Total miles requiring additional costs, including engineering and other consultants	245	309	322

Source: *Envy Report*, Table 4-6.

¹ONLY MAIN ROADS ARE CONSIDERED AND COUNTED BASED ON THEIR IDENTIFICATION USING GOOGLE EARTH.

²LENGTHS OF HDD SUBTRACTED.

Table 5-3. Construction cost comparisons for three viable DAPL route alternatives.

	Route/Cost		
	Alternative 1 East of Missouri River	Alternative 2 Crossing at Lake Oahe	Alternative 3 Crossing 10 mi. north of Bismarck
Road/railroad bores¹	\$968,800	\$380,600	\$692,000
Installation for non-HDD Areas	\$443,251,550	\$555,964,087	\$580,026,314
Horizontal Directional Drilling (HDD)	0	\$11,481,000	\$9,502,140
Geotechnical investigation	\$281,750	\$355,350	\$370,300
Mainline valves (one valve per each 10-mile segment)	\$11,250,000	\$13,950,000	\$14,850,000
Right-of-way acquisition	\$47,859,525	\$60,361,605	\$62,901,090
Additional costs including engineering & other consultants	\$32,095,000	\$40,479,000	\$42,182,000
Total Cost	\$535,706,625	\$682,971,642	\$710,523,844

Source: *Envy Report*, Table 4-7.

¹Only main roads are considered and counted based on their identification using Google Earth.

While NEPA rules do not specifically require a cost-benefit analysis for projects, the Army Corps committed to such an analysis, albeit a simplistic one, that was included in the DAPL EA. The Tribes have requested that a more comprehensive analysis be conducted; the PDEIS prepared by the Army Corps missed the mark in providing that kind of comprehensive analysis that is necessary and should be conducted.

At the July 9, 2021, Cooperating Agency Meeting held at Fort Yates, ND on the Standing Rock Sioux Reservation, the Army Corps made no statements to indicate, either directly or indirectly, that they intended to conduct such a cost-benefit analysis for the range of alternatives in the EIS. The PDEIS that the Cooperating Agency Tribes received a week later only made vague reference to the “economics” that were provided by Dakota Access regarding “economic losses” the company would suffer due to a DAPL shutdown. While no additional studies substantiating this claim was shared with the Tribes, it appears the Army Corps relied heavily on the previous EA and on a 23-page economic analysis report prepared by ICF International on behalf of API.³³⁰ ICF, like the EIS contractor ERM, is a large, vertically integrated international consulting firm with strong business ties to federal government, API, and the oil and gas sector.

³³⁰ ICF. Economic Impacts of a Dakota Access Pipeline Shutdown. September 1, 2020. Available at; <https://www.api.org/news-policy-and-issues/energy-infrastructure/economic-impacts-of-a-dakota-access-pipeline-shutdown> (Accessed: July 1, 2021).

05.2.3 Spill Risk, Safety, and Emergency Response Issues

Spill risk, safety, and emergency response issues have been at the heart of the Tribes' concerns since ET/Dakota Access LLC announced its proposal for the DAPL in 2014. Throwing fuel on the fire is Dakota Access' and the Army Corps' insistence that, "the risk of a large spill into Lake Oahe is not merely low—it is almost nonexistent."³³¹ Dakota Access further states in the court record that:

"No one disputes that (1) a spill materially exceeding [redacted from public version] barrels at Lake Oahe is a once-in-human-existence event; (2) DAPL has had no spills on its nearly 1,200-mile mainline in more than three years of operation; and (3) Dakota Access has response plans in place to swiftly and effectively remediate a spill many times larger than the worst-case discharge (WCD) the Corps modeled."³³²

Based on the PHMSA violations made public in June 2021 (See, Section 5.2.3.2 PHMSA Cites the DAPL for Significantly Dangerous Safety Violations) and ET/Sunoco's safety records as discussed in this section, the assertion above is, at best, questionable.

Dakota Access continued to mock the court for remanding that an EIS is necessary:

"The Corps applied these factors and concluded [sic, in the EA] that the likelihood of a large discharge of oil at Lake Oahe was too small to warrant an EIS. Indeed, even putting aside DAPL's many extra safety features and its location more than 90 feet below the lakebed, extensive government data prove that the chance of a major leak at Lake Oahe—i.e., one materially different from any that the Corps has already extensively modeled— is 1 occurrence in nearly 200,000 years. The district court ordered the Corps to perform an EIS without seriously questioning this minimal risk of a large spill. Instead, the court flyspecked the Corps' analysis, identifying four discrete controversies—largely concerning the impact of even more unlikely "perfect storm" events—that it believed remained unresolved.

In giving these perceived controversies dispositive weight, the court expanded the "highly controversial" factor, elevated its importance, and imposed heightened scrutiny on agency decisions not to prepare an EIS. The court failed to defer to the Corps' expert judgment to resolve disputes about a possible spill's likelihood and potential magnitude and put any controversy in context."³³³

Again, as discussed in this section below, ET/Sunoco has supposedly constructed other new pipelines with the same modern, state-of-the-art technologies, yet those failures have resulted in disastrous consequences for citizens and their water in the vicinity of their pipelines elsewhere in the U.S.

Despite the Dakota Access and Army Corps protestations, the risk of catastrophic spills and long, slow leaks were not only on the minds of the Tribes, DOI, and EPA (and initially the

³³¹ *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*. Redacted opening brief of Dakota Access, LLC, Document #1858504 at 43 (D.C. Cir. Aug. 28, 2020).

³³² *Id.*

³³³ *Standing Rock v. U.S. Army Corps of Engineers*. Case No. 20-5197 Document No. 1858504 (D.C. Cir. Aug. 26, 2020).

Army Corps under the Obama administration), but the Tribes and these federal agencies with a trust responsibility to the Tribes have been documenting the risks for years before it finally found its way into Judge Boasberg's consciousness in 2017. The Tribes' February 14, 2017 motion for a summary judgement challenging the Army Corps' issuance of permits for the Lake Oahe easement based on the Army Corps' Tribal treaty, NEPA, and CWA violations is arguably, and in hindsight, a pivotal moment in the case.³³⁴

The spill risk, safety, and emergency response issues were not initially given the long overdue attention it deserved. Judge Boasberg, to some extent, remedied the situation by remanding the Army Corps to fix its NEPA deficiencies as ordered in his June 14, 2017 ruling. Judge Boasberg followed up on this in his subsequent ruling on December 4, 2017, ordering Dakota Access to 1) work with Tribes to finalize a spill response planning, 2) conduct an "independent" third-party audit; and 3) file bi-monthly status reports on the pipeline since it had begun flowing oil in May 2017.³³⁵

Subsequent rulings that placed spill risk at the core of the DAPL problem were issued on March 25, 2020 (requiring the EIS) and July 6, 2020 (vacating easement and ordering pipeline shutdown while EIS in progress).

The discussion in this section also brings to light those other significant issues the Tribes have raised regarding spill risk, safety, and emergency response. Some of these issues have been touched upon in Section 5.2.1.1 on HDD and pipeline construction and placement. The issues are also discussed in the context of the four reports listed in Section 5.1.1. To the extent possible, the discussion avoids technical engineering jargon and detail. For their part, the EA and the Army Corps' *Analysis of Issues* are laden with contradictions, misstatements, mischaracterizations, omissions, and an overarching lack of transparency, which the Tribes' technical team of experts have been dissecting and which have culminated in the reports heavily referenced in this section.

For purposes of this discussion, the issues are generally framed in terms of "context" and "intensity," definitions that were deleted by Trump's CEQ NEPA overhaul, along with the important term "significantly." This report discusses the implications of the deletions in the context of Trump era NEPA changes in Section 3.2. Nevertheless, these are important terms that, despite being stricken from the regulations as they do not change the stated purposes of NEPA:

*"...to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation."*³³⁶

The "context" for these issues is a place of extraordinary importance to the Tribes; a landscape of profound cultural and religious importance; and the water supply for the Tribes and millions of others. It takes place on land promised to the Sioux in perpetuity by the U.S. government only to be stolen a few years later, and on land condemned for the construction of Oahe Dam, which destroyed the best lands left on the Standing Rock and Cheyenne River Sioux Tribes' individual reservations. The Missouri River is also a designated high consequence area ("HCA") under federal law, which requires heightened

334 *Standing Rock*. Case 1:16-cv-01534-JEB Document 117 (Feb. 14, 2017).

335 *Standing Rock*. Case 1:16-cv-01534-JEB Document 302 (Dec. 4, 2017).

336 42 U.S.C. 4321

protections from crude oil pipelines.³³⁷ In other words, the Army Corps' authorization of a major oil pipeline that puts the Tribe at risk did not take place on a blank slate, but in a context of a profoundly special place and a pattern of government-imposed trauma.

The "intensity" factors are those that the Army Corps dismissed in their remand report, *Analysis of Issues*, and the risks and impacts of oil spills in the Missouri River, which implicate multiple factors that have significant potential impacts; thereby, indicating why an EIS has long been warranted. The D.C. District Court had previously ruled that the Army Corps' conclusion that no EIS is needed is unlawful where "scientific or other evidence... reveals flaws in the methods or data relied upon by the agency."³³⁸

05.2.3.1 They're Never the Worst One. But...

"They're never the worst one. But they're always in the top 10."

Carl Weimer, Founder & former Executive Director, Pipeline Safety Trust, Bellingham, WA, who worked with PHMSA & industry groups to develop performance standards, commenting on Energy Transfer in 2020.

Being ranked in the top 10 seems like it might be an honor you'd want bestowed if you're a competitive athlete or a sports team. But being ranked in the top 10 as one of the worst pipeline operators? It's not exactly an honor, nor does it instill a whole lot of trust among the communities in which you operate. An operator of that kind can, however, be assured of lots of unflattering press.³³⁹ **However, ET's safety record is not actually something to joke about. Contrary to the arguments the Army Corps and its third-party EIS contractor, ERM, have made about the DAPL's safety in the PDEIS, research and analysis conducted by the SRST technical team querying the very same PHMSA database indicates that when accounting for ET's many subsidiaries, including Sunoco and Dakota Access LLC, ET is well within reach of being the No. 1 worst pipeline operator in the U.S.**

The key elements of the November 24, 2020, *Holmstrom Report* are incorporated in this report. That report was prepared for submission by SRST to the D.C. Circuit Court of Appeals in opposition to Dakota Access LLC's and the Army Corps' appeals of the D.C. District Court's July 6, 2020 order vacating the Lake Oahe easement. Most significantly, the D.C. District Court ordered the DAPL to be shut down and drained within 30 days of July 6, 2020. The discussion in this section also summarizes the ET/Dakota Access/Sunoco violations simply to provide a flavor for some of the egregious violations that characterize Dakota Access' operations. A deeper dive into the *Holmstrom Report* provides **nearly 70 summary accounts cataloging the numerous ET violations and the plethora of compliance and safety management issues associated with Dakota Access/Sunoco and the DAPL.**

To begin, ET/Dakota Access/Sunoco has one of the worst U.S. hazardous liquid pipeline safety records for the last 13 years.³⁴⁰ ET, DAPL, and Sunoco are referenced in this discussion as one company as DAPL and Sunoco are subsidiaries of ET, the corporate parent of a family of hazardous liquid pipelines regulated by PHMSA. ET also owns and controls other subsidiaries

³³⁷ 49 C.F.R. §192.905.

³³⁸ *Standing Rock* III, 255 F. Supp. 3d at 128.

³³⁹ Along Mariner east pipelines: secrecy and a patchwork of emergency plans leave many at risk and in the dark. *Available at:* <https://lebtown.com/2020/10/15/along-mariner-east-pipelines-secrecy-and-a-patchwork-of-emergency-plans-leave-many-at-risk-and-in-the-dark/> (Accessed on: May 30, 2021).

³⁴⁰ *SRST Remand Report* at 34.

that are less than wholly owned. PHMSA requires that hazardous liquid pipeline spills meeting specific criteria be reported to the agency³⁴¹ and assigns an Operator ID for each pipeline system identified in PHMSA submissions.

PHMSA also requires that operators identify the safety program relationship between different operators and the primary operator for those pipelines. For purposes of reporting DAPL hazardous liquid incidents to PHMSA, ET has grouped together DAPL and the connected Energy Transfer Crude Oil Company, LLC (DAPL-ETCO). For DAPL-ETCO, ET is identified as the primary Operator ID. In total, 14 different hazardous liquid Operator IDs have Energy Transfer LP (Operator ID 32099) as the designated primary operator indicating their common safety program relationship. These include Sunoco LP (18718), Mid-Valley Pipeline (12470), West Texas Gulf (22442), Energy Transfer (32099), DAPL-ETCO Operations Management LLC (39205), Inland Corporation (32683), Permian Express Partners LLC (39596), Bayou Bridge Pipeline LLC (39462), and Harbor Pipeline Co. (7063). The *Holmstrom Report* on ET pipeline safety performance and incident data focused on these nine hazardous liquid pipelines.

While some of the listed ET hazardous liquid pipelines have been more recently constructed (DAPL-ETCO, Permian Express and Bayou Bridge), others have a lengthier corporate subsidiary relationship with ET or its predecessor Energy Transfer Equity (ETE). ETE's then subsidiary Energy Transfer Partners (ETP) had acquired Energy Transfer Equity LP and merged in 2018 to form Energy Transfer LP. In 2012, ETE's then subsidiary Energy Transfer Partners (ETP) had acquired Sunoco for \$5.3 million. Sunoco, Sunoco LP, Sunoco Logistics, and ETP were listed as consolidated subsidiaries of the parent corporation ETE in its 2012 Annual Report.³⁴² At the time of the Sunoco acquisition by ETP, Kelcy L. Warren was both the Chairman of the Board of ETP and its General Partner and Mr. Warren was also listed as the General Partner of ETE, LE GP LLC.³⁴³

The *Holmstrom Report* reviewed the safety record of ET's consolidated subsidiaries and associated controlled hazardous liquid pipelines focusing on incident and safety data since 2012 while also evaluating performance since 2016 to assess any improvements. The *Holmstrom Report* also looked at performance of the pipelines since 2006 to provide historical context.

In the 2012 Sunoco acquisition, ETE became the corporate parent of what is now a significant portion of its hazardous liquid pipeline assets, including Sunoco LP, Mid-Valley Pipeline Co., and West Texas Gulf Pipeline Company. These three pipelines, in addition to ET's separately listed pipelines, account for over 90% of hazardous liquid pipeline spills for ET's family of pipelines since the 2012 acquisition.³⁴⁴

Overall, the *Holmstrom Report*, not so surprisingly, found a litany of poor safety records indicating that there is a higher risk that a DAPL spill will occur, and that when it happens,

341 49 CFR §195.50. Reporting Accidents requires an accident report for hazardous liquid spills (with some exceptions) that result in spills over 5 gallons, explosion or fire, death of a person, personal injury requiring hospitalization, estimated property damage exceeding \$50,000.

342 Energy Transfer Equity 2012 Annual Report, p.4, <https://ir.energytransfer.com/static-files/6a687e75-d5fc-4a96-bc4d-b346e79ab250>. Id. at 119 and 121. The 2012 Annual Report states that ETE as a limited partnership is managed by its General Partner. The report also states, "Our General Partner is majority owned by Kelcy Warren." Kelcy Warren is currently the CEO and Chairman of the Board of the General Partner of Energy Transfer LP.

343 Id. at 119 and 121. The 2012 Annual Report states that ETE as a limited partnership is managed by its General Partner. The report also states, "Our General Partner is majority owned by Kelcy Warren." Kelcy Warren is currently the CEO and Chairman of the Board of the General Partner of Energy Transfer LP.

344 PHMSA provides pipeline safety source data in several formats. <https://www.phmsa.dot.gov/data-and-statistics/pipeline/source-data>. Operator hazardous liquid incident data and programmatic information can be found and searched on the Operator Information web page <https://www.phmsa.dot.gov/data-and-statistics/pipeline/data-and-statistics-overview>. Detailed hazardous liquid incident data spreadsheets derived from incident reports can be downloaded from the Annual Report Data web page <https://www.phmsa.dot.gov/data-and-statistics/pipeline/gas-distribution-gas-gathering-gas-transmission-hazardous-liquids>. The most recent hazardous liquid annual file provides incident data from 2010 to present.

the consequences will be severe.³⁴⁵ However, this elevated DAPL risk has not been effectively evaluated by ET themselves, nor is there any evidence the company has taken appropriate corrective action to achieve performance improvement.³⁴⁶

Having now received approval to double capacity from the four states the pipeline traverses, DAPL shows no indication that it will adduce some evidence demonstrating that it is taking appropriate corrective actions to improve on its poor safety record and integrity management processes. **While one would naturally believe that such poor safety records would compel the Army Corps to address this in the EIS, the PDEIS released to Tribes makes no mention of it. In fact, the Army Corps Omaha District Commander and District Engineer, Colonel Mark Himes, stated to the OST as recently as October 8, 2021, that he was “unaware” of ET/Sunoco’s safety violations and poor safety performance record.³⁴⁷**

The *Holmstrom Report* further elaborates on the history of ET pipelines, which is replete with spill incidents - and not just in the distant past. In recent months and years, ET and its pipelines have caused a number of high-profile release incidents that have resulted in government enforcement actions, shutdowns, and demand for remedial actions.

As of December 3, 2018, the DAPL had experienced 12 spills of over 6,100 gallons of Bakken crude oil in less than two years of operation.³⁴⁸ The PDEIS failed to mention this.

From 2006 to 2018 across all ET hazardous liquid pipeline entities in the PHMSA database that are wholly owned subsidiaries of ET or in which ET has a controlling interest, hazardous liquid incidents numbered 458 with \$109,737,246 in property damage and 2,557,716 gallons (60,898 bbl) of hazardous liquid spilled.³⁴⁹

For the same 13-year period, ET entities experienced 45% more hazardous liquid spills than the pipeline company with the next largest number of incidents. Just in the 2017-2018 operating period of DAPL, ET company-wide hazardous liquid spills have resulted in \$20,540,487 in property damage, indicating significant harm from the company’s most recent hazardous liquid pipeline operations. Also, for that 13-year period, ET experienced three spills a month - by far the highest spill incident rate in the industry for that period.³⁵⁰

In recent years, ET’s poor safety record has prompted unprecedented regulatory enforcement actions. In 2017-2018, Sunoco was forced to suspend pipeline operations because of environmental contamination on four separate occasions across three states.³⁵¹

In Pennsylvania, the Secretary of the Department of Environmental Protection (DEP) noted “a permit suspension is one of the most significant penalties DEP can levy.” HDD drilling operations were reported shutdown by FERC on the Rover Pipeline in Ohio related to the release of nearly 150,000 gallons of drilling fluid. A spill of 2,000,000 gallons of drilling fluid reportedly occurred at the same site in April 2017.³⁵² The Mariner 2 East pipeline was shut down January 3, 2018, by the Pennsylvania DEP for leaks and spills that were described as “egregious and willful violations”

³⁴⁵ Donald S. Holmstrom. Pre-filed testimony of Donald Holmstrom on behalf of intervenor Standing Rock Sioux Tribe, In the matter of Dakota Access, LLC Consolidated Application for an Amended Certificate of Corridor Compatibility and Amended Route Permit: Dakota Access Pipeline Pump Station, Emmons County Siting Application. Case no. PU-19-204 | OAH File. no. 20190280, North Dakota Public Service Commission (November 1, 2019).

³⁴⁶ *Id.*

³⁴⁷ Oglala Sioux Tribe Special Tribal Council Session with Army Corps of Engineers (Oct. 8, 2021). Available at: <https://www.facebook.com/THEOGLALANATION/videos/482240193489923/> (Accessed on: Oct. 12, 2021).

³⁴⁸ *Id.*

³⁴⁹ *Id.*

³⁵⁰ *Id.*

³⁵¹ *Id.*

³⁵² Feds shut down new drilling along Rover pipeline project, The Columbus Dispatch (May 11, 2017). Available at: <https://www.dispatch.com/story/news/environment/2017/05/11/feds-order-halt-to-new/21061625007/> (Accessed on; May 22, 2021).

of law. So egregious were these violations that Pennsylvania Governor Tom Wolf ordered the pipeline shut down for good in March 2020.³⁵³ West Virginia's DEP reportedly ordered the halt to Sunoco's Rover Pipeline Construction in July 2017 due to environmental violations.³⁵⁴

A Pennsylvania grand jury released its report on October 5, 2021, concluding that ET "flouted the state's environmental laws and fouled waterways and residential water supplies across hundreds of miles" along the Mariner 2 East pipeline.³⁵⁵ ET, Sunoco's owner, now faces 48 criminal charges, most of them for illegally releasing industrial waste at 22 sites in 11 counties across the state. A felony count accuses Sunoco of willfully failing to report spills to state environmental regulators. Pennsylvania Attorney General Josh Shapiro also said ET ruined the drinking water of at least 150 families statewide. The PA AG also highlighted that the grand jury report includes **testimony from numerous residents who accused ET of denying responsibility for the contamination and then refusing to help.**

DAPL-ETCO pipelines have experienced 12 spills since the DAPL pipeline was operational in June of 2017. Over six thousand gallons (146 bbl) of crude oil has been spilled with nearly \$200,000 in property damage. One spill impacted a High Consequence Area (HCA) and another spill of five thousand gallons (119 bbl) was categorized by PHMSA as significant.

PHMSA pipeline safety regulations have developed the concept of an HCA to identify specific locations where spills can have the most serious negative impact on critical resources such as drinking water sources, populated locations, and "unusually sensitive" environmental areas. **HCAs require additional regulatory programs such as Integrity Management Plans to prevent spills from impacting these highly sensitive areas. Lake Oahe has been determined to be an HCA due to its ecological characteristics.**

The *Holmstrom Report* states,

"From my experience and review of the PHMSA incident data, this number and impact of spills for a pipeline only in operation for 3 years is highly unusual and very concerning."³⁵⁶

The nine ET pipelines tracked by the *Holmstrom Report* from 2012 to present spilled hazardous liquid on 290 occasions or on average 2.9 spills per month. These spills were not minor or lacking impact. Ninety-four or 32% of those were significant incidents as defined by PHMSA. The spills resulted in over **2 million gallons (48,777 bbl) of hazardous liquid released** with over **\$90 million in property damage.** ET's separate Operator ID shows that those pipelines alone **spilled over 625,000 gallons (14,994 bbl) of hazardous liquid** with **property damage of nearly \$5 million.**

The *Holmstrom Report* continues,

"Equally alarming is the record in HCAs. From 2012 to 2018³⁵⁷ the ET pipelines experienced 50 incidents defined as large spills by PHMSA.³⁵⁸ Nearly 20% of all the spills over this period were large spills in high consequence areas like Lake Oahe."

353 Mariner East construction shut down by governor's order, WHYY (March 20, 2020). Available at: <https://whyy.org/articles/mariner-east-construction-shut-down-by-governors-order/> (Accessed on May 22, 2021).

354 WV DEP orders Rover pipe to stop construction for violations, Marcellus Drilling News (March 18, 2018). Available at: <https://marcellusdrilling.com/2018/03/wv-dep-orders-rover-pipe-to-stop-construction-for-violations/>. (Accessed on May 22, 2021).

355 Rubinkam, M., Pipeline developer charged over systematic contamination. AP News. Oct. 5, 2021. Available at: <https://apnews.com/article/business-pennsylvania-philadelphia-environment-crime-20c337b3e287091c7f7fb6f62156b6e1> (Accessed: Oct. 5, 2021).

356 *Holmstrom Report* at 10.

357 PHMSA's integrity management performance data is available through 2018.

358 To be classified as a large HCA spill by PHMSA the release must result in death or personal injury requiring hospitalization, property damage greater than \$50,000, a release of more than 5 barrels, fire or explosion, or pollution of water.

Looking at the data from 2006 to present, the same nine pipeline Operator IDs experienced 490 spills, or 2.9 per month. Of those 490 spills, 148 or 30% of those incidents were categorized as significant by PHMSA.³⁵⁹ From 2004 to 2018, these pipelines had **107 large spills in HCAs and required over 900 HCA immediate condition repairs.** The **spill volume over 14 years in HCAs alone totaled nearly 3 million gallons (71,172 bbl) and resulted in \$113 million in property damage.**

The *Holmstrom Report* also noted that most of the property damage (\$90 Million) occurred under ET corporate leadership compared to the 14-year total of \$113 million for the 9 Operator IDs. **The three pipelines Operator IDs historically related to Sunoco - Mid-Valley, West Texas Gulf and Sunoco LP - account for over 90% of the PHMSA fines since the ETE acquisition in 2012.**

The *Holmstrom Report* makes a rather salient point where Holmstrom compared the PHMSA record of the ET family of pipelines to other major hazardous liquid pipeline corporations and their primary Operator IDs from both 2012 and 2016 to present. **Since 2012, ET's family of pipelines had 291 spills - the most of any other corporate family of pipelines. During that period, ET had the most significant incidents and barrels spilled. Since 2016, ET's 125 hazardous liquid spills were second worst (trailing only Enterprise with 231 spills). ET was second also in terms of property damage and barrels spilled.** Holmstrom noted this when he examined hazardous liquid pipelines with the **greatest number of spills since 2017 where the "item involved" in the spill was limited to newer installations for pipeline operator IDs transporting primarily crude oil.**³⁶⁰

Since 2017, ET's family of pipelines experienced 28 spills, second only to Enterprise with 36. A single pipeline operator ID DAPL-ETCO was fourth with 12 spills. **Looking at the most recent data through 2019, ET had the second worst spill record overall involving new installations. The DAPL-ETCO safety record was particularly concerning having the fourth most spills for a single pipeline Operator ID for new installations** compared to other pipeline families.

The *Holmstrom Report* states:

*"The Corps mischaracterizes the Tribe's position concerning more prevalent failures with newer pipelines such as DAPL. The Corps asserts that since DAPL has been in operation for nearly three years it is now no longer "new" and not subject to a generalized concern of spills and incidents. The Tribe, however, in its 2018 SRST Spill Report submitted during the remand cited an analysis by the Pipeline Safety Trust (PST) for pipelines installed since the 1920s, that "more dangerous still were the very newest pipelines - those installed since 2010."*³⁶¹

The PST report had compared decades of performance, not "new" pipelines. The incidents since 2010 by pipeline mileage were more than double the previous decade of the 2000s and greater than pipelines built in the 1920s (**Figure 5-10**).³⁶²

More importantly, the Holmstrom review is not generalized in the way the Army Corps and its third-party contractor, ERM, attempted in the PDEIS. As stated by Holmstrom,

³⁵⁹ PHMSA defines a significant spill as resulting in death or injury requiring inpatient hospitalization, \$50,000 in total costs, non-HVL liquid such as crude oil of 50 barrels or more, releases resulting in fire or explosion or HVL releases of 5 barrels or more.

³⁶⁰ New installations refer to new equipment, pipelines systems, and expansions, extensions, or replacements. The review focused on new installations since 2016, the year that DAPL's 12 spill incidents listed as the equipment involved in the spill as the "installation year."

³⁶¹ Pipeline Safety Trust, *Are Older Pipelines Really More Dangerous*, Pipeline Safety, Spring 2015, p. 6. Available at: <https://pstrust.org/wp-content/uploads/2013/03/Incidents-by-age-of-pipes-PST-spring2015-newsletter-excerpt.pdf>. (Accessed on June 12, 2021).

³⁶² *Id.*

“...the DAPL-ETCO and ET safety data and incident record underscores the corporate-specific concerns about the frequency and severity of their pipeline spills.”

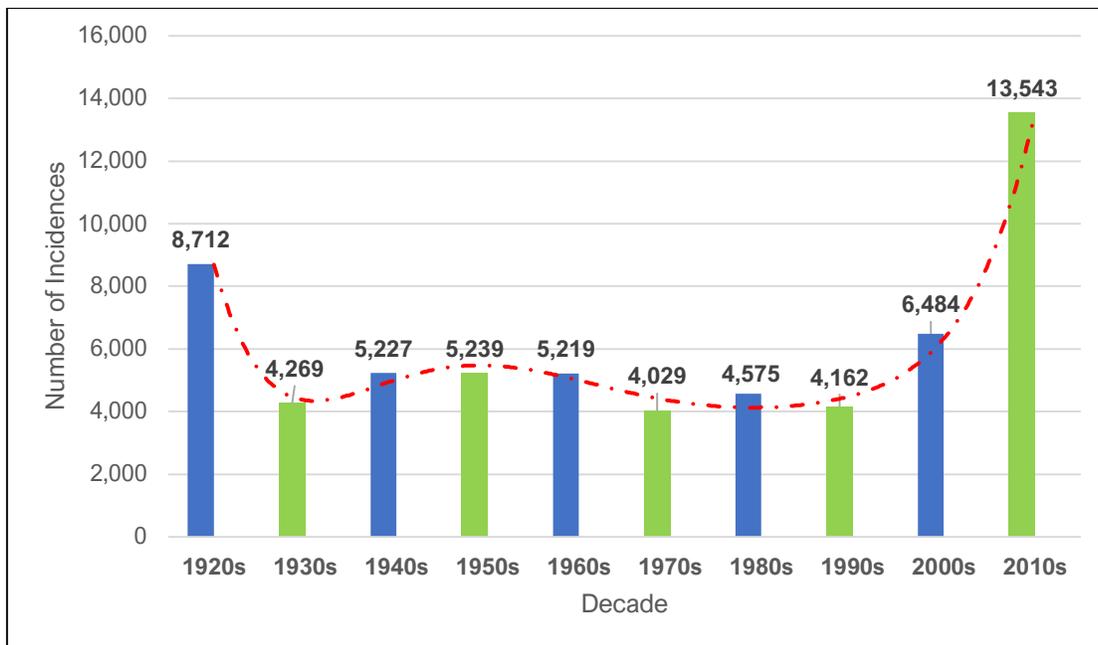
The Holmstrom Report also makes it clear that it is a gross understatement that the D.C. Court erred in its judgement to allow DAPL to continue to operate during the EIS, given the dirty pile of violations and incidents ET and its subsidiaries have continued to stack up. No amount of chemical and soil remediation will remove the permanent stains that have been wrought on the land and water in the communities ET/Sunoco has been permitted to construct and operate.

05.2.3.2 PHMSA Cites the DAPL for Significantly Dangerous Safety Violations

Consistent with ET’s/Sunoco’s long history of repeated safety violations, on June 22, 2021, PHMSA issued a Notice of Probable Violation (NOPV), Proposed Civil Penalty, and Proposed Compliance Order (“Notice”) to the DAPL operator – Energy Transfer – detailing a substantial number of probable violations of the Pipeline Safety Regulations (49 C.F.R. Part 195) that PHMSA found during its April 29, 2019 through August 30, 2019 inspection.³⁶³ The inspection included a review of the DAPL procedures, facilities, and records that covered the portion of the pipeline that stretches from the northwestern portion of North Dakota (i.e., Stanley, ND) to the east state line of South Dakota.

The Notice makes clear that, since its inception, the DAPL has posed an imminent threat to the safety and sanctity of the Tribes’ water, hunting and fishing rights, and cultural

» Figure 5 10. Number of incidents per 10,000 miles for onshore hazardous liquid pipelines by decade.



³⁶³ Letter to Matt Ramsey, Chief Operating Officer, Energy Transfer LP, DAPL-ETCO Operation Management, LLC from Gregory A. Ochs, Director, Central Region, Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Agency (PHMSA), Office of Pipeline Safety (OPS). Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order. (June 22, 2021). Available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-07/Energy%20Transfer-Dakota%20Access%2032021049NOPV_PCP%20PCO_07222021_%2821-211190%29.pdf (Accessed on: Sept. 21, 2021).

and religious practices as it has been operating unsafely in violation of the Pipeline Safety Regulations found in 49 CFR Part 195.³⁶⁴

The Notice confirms the Tribes' concerns about the DAPL's safety and specifics:

1. The DAPL has been operating under conditions "that could adversely affect the safe operation of its pipeline."³⁶⁵

Between June 1, 2017 and December 13, 2019, fluctuating nitrogen pressure in the relief valves—which are specifically designed to protect against overpressure in the pipeline—**set off 9,541 alarms across multiple DAPL locations**. As the Notice points out, **ET allowed these fluctuations to continue, never once bothering to correct these conditions within a reasonable time.**³⁶⁶

2. **The DAPL operators violated pipeline operation and maintenance regulations by allowing the pipeline at one location to exceed the overpressure limits established under law and by "fail[ing] to inspect and test the overpressure safety relief valve" at another location throughout the entirety of 2018.**³⁶⁷ Breakout tanks "relieve surges in a hazardous liquid pipeline system or . . . receive and store hazardous liquid transported by pipeline for reinjection and continued transportation by pipeline."³⁶⁸
3. **The DAPL's operators abandoned their obligations regarding pipeline construction by improperly locating the stormwater drainage valves at six separate breakout tank locations.**³⁶⁹
4. The DAPL operator's internal policies fare no better. Until June 13, 2019, **ET used out-of-date procedures** governing, among other things, the activation and deactivation of the DAPL, pressure testing, changes in the maximum operating pressure of the DAPL, and DAPL repairs, which had been removed from its Operations and Maintenance Manual but remained in its Integrity Management Plan (IMP). **The DAPL IMP was also found by PHMSA to be "outdated as [ET/Dakota Access] ...failed to continually update the IMP based on their operating experience and evaluations with respect to how the DAPL's failure could affect HCAs."**³⁷⁰ **Notably, the area around the Lake Oahe crossing has been designated an HCA.**
5. Even the DAPL's public awareness campaign was developed in violation of the Pipeline Safety Regulations. The regulations require ET to follow the supplemental requirements set forth in the API's Recommended Practice on Public Awareness Programs for Pipeline Operators ("API 1162") unless it "provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety."³⁷¹

ET never implemented the API 1162 recommendations nor justified its decision not to do so. Specifically, ET "did not consider consequences from a spill in areas designated as high

³⁶⁴ *Id.*

³⁶⁵ *Id.* Notice at 2, citing 49 C.F.R. §195.401(b)(1).

³⁶⁶ *Id.* Notice at 2.

³⁶⁷ *Id.* Notice at 4-5, citing 49 C.F.R. §§195.406, 195.428.

³⁶⁸ *Id.*

³⁶⁹ *Id.* Notice at 2, citing 49 C.F.R. § 195.264

³⁷⁰ *Id.* Notice at 7, citing 49 C.F.R. § 195.452(f)(1).

³⁷¹ *Id.* Notice at 5-7, citing 49 C.F.R. § 195.440.

consequence areas (HCAs) . . . when it determined the scope of its stakeholder audience for it [sic] public awareness communications.” ET also failed to provide documentation showing how it considered or implemented API 1162’s “recommendations associated with supplemental program enhancements due to the consequences of moving crude oil, such as overland spill.”³⁷²

Consequently, PHMSA issued two warnings, a Proposed Compliance Order, and two civil fines totaling \$93,200—one for the out-of-date procedures in the DAPL’s IMP and another for violations associated with the DAPL’s public awareness campaign.³⁷³

In a letter to President Biden on September 22, 2021 – the same day the Tribes sent letters to the Army Corps chastising the agency for the PDEIS and EIS process, SRST Chairman Mike Faith wrote:

“The Notice is damning and makes clear the DAPL has always operated illegally, unsafely, and in violation of federal law, the Tribes’ Treaty rights, and the federal government’s trust obligations to the Tribes. However, the warnings and Proposed Compliance Order effectively offer the DAPL more time to operate unsafely and, therefore, create additional opportunities for an oil spill that will have a catastrophic effect on the Tribes and its way of life.”³⁷⁴

Dakota Access’ DAPL recently increased its capacity from 570,000 bpd to 750,000 bpd.³⁷⁵ Considering PHMSA’s Notice, **Tribal leaders demanded that President Biden acknowledge the dangers of the DAPL to the Tribes. Tribal leaders were also adamant that the President honor the treaties and the U.S. government’s trust responsibility by shutting down the DAPL.**

“...the fines will not put an end to the DAPL’s unsafe operation or mitigate the harm the DAPL will cause as they pale in comparison to the earnings the DAPL produces each quarter as well as the resources the Tribes and the federal government will be forced to use when the DAPL inevitably spills or bursts.

The Corps already has grounds to stop the operation of the DAPL, and the Notice further supports its shutdown. Earlier this year, the United States Court of Appeals for the District of Columbia Circuit affirmed the District Court’s 2020 ruling that the Corps violated the National Environmental Protection Act (NEPA) by failing to prepare an EIS prior to granting the easement for the DAPL to cross Lake Oahe. Although the easement was vacated and the Corps declared the DAPL an encroachment, the Corps is allowing the DAPL to operate while it prepares its EIS and considers what to do pursuant to its encroachment regulations.

Through diplomacy, litigation, and protests, we have called upon the federal government to meet its treaty and trust obligations to us by immediately halting the operation of the DAPL. In our January 17, 2021 letter to you, we asked that you put an end to the Trump-era policy permitting the DAPL to operate in the absence of an EIS and an easement. In February 2021, we

³⁷² *Id.*

³⁷³ *Id.* Notice at 8.

³⁷⁴ Letter to President of the U.S. Joseph R. Biden from Tribal Chairmen Mike Faith (Standing Rock Sioux Tribe), and Harold Frazier (Cheyenne River Sioux Tribe), Tribal Vice Chair Jason Cooke (Yankton Sioux Tribe), and Tribal President Kevin Killer (Oglala Sioux Tribe). (Sept. 22, 2021).

³⁷⁵ Jeff Awalt, *Energy Transfer Completes DAPL Expansion, Updates Pipeline Projects*, PIPELINE & GAS J. (Aug. 6, 2021), Available at: <https://pgjonline.com/news/2021/august/energy-transfer-completes-dapl-expansion-updates-pipeline-projects>. (Accessed on: Aug. 6, 2021).

engaged in a Tribal consultation on the DAPL with White House Climate Advisor Gina McCarthy and Special Assistant to the President for Climate Policy David Hayes where Ms. McCarthy expressly acknowledged the United States' treaty and trust obligations to us. She also explained the White House was delaying acting on the DAPL until Corps leadership was in place in April. It is September, and the United States has not yet enforced the law.

It is wrong and unjust to allow the DAPL to operate across our treaty lands notwithstanding the requirements of the Mineral Leasing Act, NEPA, and the Pipeline Safety Regulations. Indeed, it is another low point in America's treatment of Indian people, who have always borne the burden of development and the failure of federal policies.

We note that by requesting immediate action to end the DAPL's operation pending an EIS and the Corps' reconsideration of the easement, we do not by any means agree that, once the EIS is completed, the Corps may grant such easement. We strongly oppose the grant of the easement because DAPL poses a grave threat to, among other things, our drinking water, hunting and fishing rights, and ceremonies essential to Tribal identity.”³⁷⁶

Tribal leaders conclude that PHMSA and the U.S. government have shown too little restraint and too much weakness in taking action to stop the DAPL once and for all.

“We appreciate the PHMSA carrying out its responsibility to inspect the DAPL and issue enforcement actions, yet the penalties, warnings, and Proposed Compliance Order PHMSA issued will not protect our lands and waters from an inevitable oil spill. It is time for the United States to finally honor the Treaties that it made with our Tribes and respect our lands and our waters and stop this illegal and unsafe pipeline.”³⁷⁷

05.2.3.3 Overview of Worst-Case Discharge, Spill Risk, and Spill Response

BACKGROUND OF STANDING ROCK'S LEGAL CASE REGARDING SPILL RISKS

D.C. District Court Judge Boasberg's ruling on March 25, 2020 ruled against the Army Corps and Dakota Access, repeating a finding he has made before that the government's seizure of tribal lands to construct the pipeline remains dubious under NEPA:

“Unrebutted expert critiques regarding leak-detection systems, operator safety records, adverse conditions, and worst-case discharge mean that the easement approval remains ‘highly controversial’ under NEPA...As the court thus cannot find that the Corps has adequately discharged its duties under that statute, it will remand the matter to the agency to prepare an environmental impact statement.”

In the lawsuit filed nearly five years ago by the SRST, Judge Boasberg had already found in 2017 that the government failed to consider the Tribes' warnings about flaws in the DAPL project that could lead to an oil spill. **Slow leaks were of particular concern as DAPL's**

³⁷⁶ Letter to U.S. President Joseph R. Biden, at 3.

³⁷⁷ *Id.*

automated leak detection system would not be able to detect leaks representing 1% or less of the pipe's flow rate. The SRST technical team specifically pointed out that:

"This means that about 25,200 gallons could be released continuously, over a long period of time, without detection."³⁷⁸

Judge Boasberg specifically pointed out that questions about the leak-detection systems and other key issues such as worst-case discharge (WCD) have gone unanswered, despite previous orders to prepare environmental reports. The court also finally recognized the technical team's concern that **harsh North Dakota winters will hamper response efforts in the event of a spill.** While Judge Boasberg did not go so far as to strike down the easement permits, he did order that the Army Corps prepare an EIS. However, Judge Boasberg initially left the door open, stating:

"As it has done before in this case, the court will order the parties to brief the issue of whether the easement should be vacated during the remand."

From the Tribes' perspective, the court already had found that the Army Corps violated the law when it issued the permits without thoroughly considering the impacts on the Standing Rock (and Cheyenne River) Sioux Tribe. **Dakota Access should not have been allowed to continue operating while the Army Corps studies were being conducted during the remand.**

In Judge Boasberg's 28-page ruling, he noted that the Army Corps' agency guidance "expressly contemplates" using an environmental assessment to deal with such significant concerns, and at the time was skeptical that an EIS would offer little help to the Tribes' case, saying it will likely only further substantiate issuance of an environmental assessment. While the remand ordered the Army Corps to conduct deeper analysis and that the need to not begin anew, Judge Boasberg did, however, caution that the agency must give "serious consideration" to the errors identified in the court's prior opinion.

"Compliance with NEPA cannot be reduced to a bureaucratic formality and the court expects not to treat remand as an exercise in filling out the proper paperwork post hoc."

Pushing back against Judge Boasberg's conclusion that an EIS was not necessary, the Tribes had originally pushed for an EIS in 2015 and throughout 2016 even before the Army Corps could grant an easement permit for construction of the pipeline passage under Lake Oahe in July 2016.

Before the general election in November 2016, the EIS was imminent. After the Obama administration denied the easement permit on December 4, 2016, the Army Corps issued an NOI to conduct the EIS. However, four days after the inauguration of President Donald Trump, the White House issued a memorandum instructing the Army Secretary to expedite the final construction of the DAPL. After a brief review, the Army Corps determined that its initial environmental assessment was legally sound, reversed its intent to conduct an EIS, and issued the easement permit.

Judge Boasberg's June 14, 2017 ruling was based largely on his opinion that the impact to the quality of the human environment was one area that the **Army Corps failed to adequately**

³⁷⁸ At the time this estimate was calculated in 2017, the Dakota Access Pipeline was at approximately half its capacity. The pipeline operated at full capacity (570,000 bpd) before receiving approval by the North Dakota Public Service Commission to expand to 1.1 million bpd. As of August 3, 2021, the DAPL was transporting approximately 750,000 bpd. A spill of one percent now would mean at least 7,500 bpd would go undetected.

address before granting the easement. Judge Boasberg further rule that the Army Corp had essentially been guilty of a dereliction of at least some of their NEPA responsibilities.

“As the agency did not demonstrate that it considered, as the CEQ regulations require, the degree to which the project’s effects are likely to be highly controversial, despite being presented with evidence of scientific flaws, the court cannot conclude that the Corps made a convincing case of no significant impact or took the requisite hard look.”³⁷⁹

As for the impact of a spill on water resources, however, Judge Boasberg said the Army Corps did not consider this issue sufficiently, questioning whether the spill response system could detect leaks within an hour or less and shut down valves within three minutes after a rupture is detected.

“As to aquatic resources, the EA offered only a cursory nod to the potential effects of an oil spill, stating simply that “[t]he primary issue related to impacts on the aquatic environment from operation of the Proposed Action would be related to a release from the pipeline.”³⁸⁰

It [the EA] never explained, though, what those effects would be. Instead, it simply reasoned that adherence to Dakota Access’s response plan would minimize potential impacts on aquatic wildlife.”³⁸¹

The SRST technical team had specifically flagged this issue in comments to the Army Corps after it published its draft EA. **Judge Boasberg likewise found the EA lacking in its analysis in relation to how a spill would impact environmental-justice issues.**

“The EA is silent, for instance, on the distinct cultural practices of the tribe and the social and economic factors that might amplify its experience of the environmental effects of an oil spill.”³⁸²

WHAT IS WORST-CASE DISCHARGE?

This section provides the legal definition of worst-case discharge (WCD). To say the least, WCD is a highly technical discussion, but it is the basis for developing a reliable spill model that can inform spill response planning. For that reason, we direct the reader to Appendix B of this document (Pipeline Safety Trust Worst Case Scenario Explainer) which provides a good and basic introduction to a very technical topic. It also contains a link to a report on WCD as it pertained to Keystone XL. The report, published by Plains Justice in 2010, *The Northern Great Plains at Risk: Spill Planning Deficiencies in Keystone Pipeline System*, is also highly informative and recommended reading.

Hazardous liquid pipeline operators are required by federal law to prepare two different kinds of emergency plans. Federal law also requires pipeline operators to develop a “worst case discharge” analysis as part of their oil spill response planning.³⁸³ The regulations define WCD to be:

“...the largest volume, in barrels (cubic meters), of the following: (1) The pipeline’s maximum release time in hours, plus the maximum shutdown

³⁷⁹ *Standing Rock*. Document no. 239 at 34 (June 14, 2017).

³⁸⁰ *Id.* at 42.

³⁸¹ *Id.*

³⁸² *Id.* at 54.

³⁸³ 33 U.S.C. §1321(j)(5)(A)(i).

*response time in hours (based on historic discharge data or in the absence of such historic data, the operator's best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels."*³⁸⁴

In brief, PHMSA defines WCD as:

*"...the largest foreseeable discharge of oil (measured in barrels (bbl); 1 bbl = 42 U.S. gallons measured at 60 deg. F) including a discharge from fire or explosion, in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is calculated according to §194.105."*³⁸⁵

And "response zones" means:

*"... a geographic area either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide, spill response capabilities. The size of the zone is determined by the operator after considering available capability, resources, and geographic characteristics."*³⁸⁶

Calculating a conservative, yet reliable, WCD is crucial because that value informs the necessary spill response plans. Thus, worst-case discharges must be determined considering fire, explosions, and bad weather, all of which may impact the extent of damage caused by a pipeline leak or rupture. In North Dakota, weather conditions can be quite extreme. **Along the Missouri River and at Lake Oahe, harsh winters of below zero temperatures leading to a lake/river that becomes frozen solid is going to severely complicate the ability of first responders to mount a response in the event of a pipeline breach. For example, the types of training, equipment, and personnel necessary to respond when the water is open is a markedly different strategy that won't be feasible in the winter. While the Army Corps states in the PDEIS that Dakota Access revised and conducted its spill modeling exercise using conservative parameters, including 100 percent ice cover in winter, the Tribes have not been granted access to the spill model techniques, methodologies, and specific data inputs that would enable the Tribes' experts to review and critique. This despite repeated requests for that information.**

PHMSA'S ROLE

PHMSA has responsibility for implementing 49 CFR §194.105 (WCD).³⁸⁷ A relatively small regulatory agency (~500 employees in five regions) within the U.S. Department of Transportation (DOT), the agency is responsible for developing and enforcing regulations for the "safe, reliable, and environmentally sound operation of the nation's 2.6-million-mile pipeline transportation system and the nearly 1 million daily shipments of hazardous materials by land, sea, and air."³⁸⁸ PHMSA is divided into the Office of Pipeline Safety (OPS) and the Office of Hazardous Materials Safety (OHMS). PHMSA is headquartered in Washington,

³⁸⁴ 49 CFR §195.105. Available at: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/194%20Master%20Document%20_194-6_%20highlighted.pdf

³⁸⁵ 49 CFR 195. Available at: <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-D/part-195?toc=1>; 89 FR 52260 Available at: <https://www.federalregister.gov/documents/2019/10/01/2019-20458/pipeline-safety-safety-of-hazardous-liquid-pipelines>

³⁸⁶ *Id.*

³⁸⁷ See: <https://www.law.cornell.edu/cfr/text/49/194.105>

³⁸⁸ See: <https://www.phmsa.dot.gov/faqs/general-faqs>

D.C. The administrator is the agency's chief executive and appointed by the President and confirmed by the U.S. Senate.

For hazardous liquid pipelines, emergency planning stems from the requirements in 49 CFR 195.402 that mandates a pipeline operator develop a manual for operations, maintenance, and emergencies.³⁸⁹ These manuals are not required to be approved by regulators and copies of them are not turned in to regulators either. However, they are reviewed during regulatory inspections as was done for the DAPL from 2017-2019 that resulted in PHMSA citing ET for seven violations in June 2021. Anything included in the manuals can be the subject of an inspection. Pipeline operators are required to include a system for:

“Establishing and maintaining liaison with fire, police, and other appropriate public officials to learn the responsibility and resources of each government organization that may respond to a hazardous liquid or carbon dioxide pipeline emergency and acquaint the officials with the operator’s ability in responding to a hazardous liquid or carbon dioxide pipeline emergency and means of communication.”

In the requirements for the emergency section of the manual, it states during an emergency the pipeline operator must have procedures for:

“Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid.”

SPILL RESPONSE PLANNING

Following the Exxon Valdez oil spill in Alaska in 1989, Congress recognized that federal law lacked specificity regarding private oil spill planning obligations. Accordingly in the Oil Pollution Act of 1990 (OPA), an amendment to the Clean Water Act (CWA), Congress expanded requirements so that owners and operators of vessels and facilities must prepare facility response plans (FRPs) where their operations might have an impact on waters protected by the Clean Water Act.³⁹⁰ For pipelines, these plans are reviewed and approved by PHMSA.

Here, the reader is again referred to [Appendix B, Pipeline Safety Trust Worst Case Scenario Explainer](#), which provides a less technical background on the spill response planning process, spill response requirements, spill response reporting, FRPs, and PHMSA’s FRP implementing regulations, including when and how PHMSA can redact FRPs. **Redactions and the withholding of spill reports has been a large obstacle in the SRST technical team’s efforts to challenge the Army Corps’ assertions that the Lake Oahe crossing is low risk.**

05.2.3.4 Challenges to Army Corps & DAPL Spill Modeling & Spill Planning

Since the Draft EA was released in November 2015, the SRST technical team has vehemently challenged the Army Corps’ and Dakota Access’ WCD analysis calculated for the DAPL, which appeared to **underestimate both the risk as well as the amount of a potential spill.** The

³⁸⁹ See: <https://www.law.cornell.edu/cfr/text/49/195.402>

³⁹⁰ See: <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations>

technical team have argued that Dakota Access' modeling is worse than a "best case" scenario in that the DAPL WCD **leaves required calculations out** and then **assumes all systems will function precisely as intended**—i.e., the incident is discovered as quickly as physically possible, the correct decision and response is immediately initiated, and all equipment such as controls, sensors, pumps, and valves function as intended. As noted above, the Army Corps contends in the PDEIS that the modeling was revised using conservative estimates, but without providing the Tribes' experts with the detailed methodology and data inputs for analysis and critique.

In the real world, however, this is not how major events happen. Major spill incidents typically occur with multiple system causes, when people, or equipment, or systems do not function exactly as they are expected to. People make mistakes. Equipment malfunctions. Systems are deficient.

The San Pedro Bay Pipeline spill off the coast of southern California on October 2, 2021, is another primary example that demonstrates how combined human error—and failures and flaws in automated leak detection systems—can result in leaks going undetected, even for a few hours, can lead to catastrophic consequences.³⁹¹

Modern major accident prevention focuses on rigorous analysis of all potential hazards (what could go wrong) and implements continuous improvement to a variety of complex, interrelated safety systems such as operational controls, human factors, integrity management, incident investigation, safety culture, risk management, and safety assurance. **Effective risk analysis must consider all these important elements to achieve incident prevention.**

Dakota Access' WCD ignores these realities and assumes that any spill will be detected immediately and shut down in a mere 9 minutes and assumed a near instantaneous detection time. In the PDEIS, the Army Corps claimed that the detection time is now three minutes, but without any data or citations to justify such a rapid detection. These statements are but one example of the unsubstantiated statements and assertions the Army Corps and their third-party contractor, ERM, make consistently throughout the PDEIS.³⁹²

Dakota Access also entirely omits the time it takes to detect the spill or the time it takes to shut off the emergency isolation valves (referred to as Emergency Flow Restriction Devices (EFRDs)). The assumptions baked into Dakota Access' WCD are not realistic and do not comply with the minimum regulatory requirements. The DAPL has backup power to the communication system but not electrical power to the valve actuator. The DAPL's EFRDs are capable of manual closure. However, travel to the remote, unstaffed location of the EFRDs particularly in winter conditions should be measured in hours not minutes.³⁹³

Detection time is a critical factor in WCD.³⁹⁴ In some cases, it takes hours or even days to detect a slow leak before shutdown is initiated.

391 J. Resnick-ault and N. Groom. Despite preparation, California pipeline operator may have taken hours to stop leak. Reuters (Oct. 8, 2021). Available at: <https://www.reuters.com/business/energy/despite-preparation-california-pipeline-operator-may-have-taken-hours-stop-leak-2021-10-08/> (Accessed on: Oct. 8, 2021); D. Onyango. A 13-inch tear in a pipeline was likely the cause of the catastrophic California oil spill. Pipeline Journal. (Oct. 7, 2021). Available at: <https://www.pipeline-journal.net/news/13-inch-tear-pipeline-was-likely-cause-catastrophic-california-oil-spill> (Accessed on: Oct. 8, 2021).

392 Letter to Colonel Mark Himes, Commander and District Engineer, Army Corps of Engineers from Mike Faith, Chairman, Standing Rock Sioux Tribe (Sept. 22, 2021). Available at: <https://earthjustice.org/sites/default/files/files/srst-ca-comment-2021-07-deis.pdf> (Accessed on: Sept. 22, 2021)

393 Donald S. Holmstrom. Pre-filed testimony of Donald Holmstrom on behalf of intervenor Standing Rock Sioux Tribe at 7, In the matter of Dakota Access, LLC Consolidated Application for an Amended Certificate of Corridor Compatibility and Amended Route Permit: Dakota Access Pipeline Pump Station, Emmons County Siting Application. Case no. PU-19-204 | OAH File. no. 20190280, North Dakota Public Service Commission (November 1, 2019).

394 *Id.*

For example, the 2016 Permian Express II pipeline spilled 361,000 gallons of crude oil and it **took ET 12 days to detect the spill and shut down the pipeline.** The spill from the central Texas pipeline, which had only been operational for one year, **led to a reported \$4 million in property damage. Yet, in the case of DAPL, Dakota Access is lacking any evidence, such as performance metrics, that assume that it can instantaneously detect any spill.**

The Army Corps' *Analysis of Issues*, and now the PDEIS, continue to defend this aspect of Dakota Access' illusion of truth using the "latest and greatest" technology argument.

"ETP is utilizing LeakWarn, which is a leading Computational Pipeline Monitoring (CPM) system software program for monitoring pipelines, to monitor the pipeline for leaks. ETP modeled, configured, and tuned the LeakWarn CPM system specific to the DAPL installation facilities, to include elevation profiles and pipeline maximum operating pressure in accordance with PHMSA requirements and API RP 1130 guidance.

According to ETP, the LeakWarn CPM system is capable of detecting leaks down to 1 percent or better of the pipeline flow rate within a time span of approximately 1 hour or less and capable of providing rupture detection within 1 to 3 minutes. Once LeakWarn detects a leak, its interface to the SCADA system will trigger an audible alarm in the SCADA system, which will alert the ETP pipeline controller. The maintenance and operation of the valves, leak detection, and notification systems are required in Easement Conditions 21, 22, and 23."³⁹⁵

Software-based leak detection systems are notoriously unreliable. A 2012 PHMSA study examined the agency's spill database and found that computational pipeline monitoring (CPM) systems **detected hazardous liquid leaks in the pipeline rights-of-way (ROW) only 20% of the time.** Similar leak detection performance can be seen by a review of ET's pipelines in the PHMSA database from 2010-18. Like the PHMSA study, more ET spills in the right-of-way (ROW) were identified by random members of the public than SCADA or CPM systems.³⁹⁶

Consideration of undetected leaks less than the 1% lower limit of LeakWarn was only given general comments by the Army Corps in the *Analysis of Issues*:

"The SCADA and LeakWarn systems are sensitive to smaller changes in flow rate and pressure" and "the risk of an undetectable underground leak is low."³⁹⁷

Assuming a 600,000-bpd production rate, and the stated LeakWarn lower detection limit of 1%, a leak of at least 6,000 bpd would go undetected by LeakWarn. In Standing Rock's *Impacts of an Oil Spill* report, the Tribe's experts determined as much as 126,000 bbls could be released before a spill is visually spotted on the ground and/or in combination with that visual observation overflights.³⁹⁸

Given that the pipeline is buried below Lake Oahe, and the long periods of ice cover on the lake during winter months, an undetected, 6,000 bpd leak could not be visually spotted and would likely continue over a long period (days, weeks, even months), resulting in a massive accumulation of crude oil. Since 2010, ETP/Sunoco has only detected hazardous

³⁹⁵ Army Corps. *Analysis of Issues* at 123.

³⁹⁶ Donald S. Holmstrom. Pre-filed testimony of behalf of the Standing Rock Sioux Tribe at 9. In Matter of Dakota Access, LLC Consolidated Application for an Amended Certificate for Corridor Compatibility and Amended Route Permit. Dakota Access Pipeline New Pump Stations - -- Emmons County Siting Application. Case. No. PU-19-204 | OAH File. No. 20190280 (Nov.1, 2019).

³⁹⁷ *Holmstrom Report* at 42.

³⁹⁸ *SRST Spill Report* at 42.

liquid spills in the rights-of-way by air patrol 4% of the time. This credible WCD scenario was not considered by the Corp despite the Tribe's request to do so. Additionally, crude oil monitor technology (such as external monitoring) needs to be evaluated and installed to provide indication of crude oil leaks under the 1% lower detection limit within the High Consequence Area (HCA) of the Lake Oahe crossing.³⁹⁹

Regarding Dakota Access' application to the NDPSC proposing to double DAPL's capacity – a volume that would also double the amount of oil that will be discharged when a spill occurs – Dakota Access continues to use only a slightly modified, but unsubstantiated WCD “generated” for the PDEIS, despite having already used an unrealistic WCD on which its oil-spill response planning efforts are currently based. **Allowing Dakota Access to double DAPL's throughput despite their failure to provide any proof of performance would impose even more serious risks on the environment and on the welfare of the citizens of the Sioux Tribes and North Dakota.**

In addition to Dakota Access' unrealistic assumption that it will instantaneously detect any spills, their WCD underestimates the true worst-case scenario for other reasons:

1. The PHMSA WCD regulation requires the worst-case analysis to be applied to each element of the calculation. Dakota Access' “best case” approach is not compliant with this explicit instruction.
2. The WCD does not appear to include any consideration of “historic” discharges and there are many examples from ET's numerous other spills and leaks going back at least 15 years.
3. Dakota Access' calculation does not include the time it takes to shut down the EFRDs after the pumps are ramped down but while oil is still flowing past the valves and out the point of pipeline failure.
4. The WCD does not account for potential delays and complications due to adverse weather conditions.
 - a. This includes the lack of backup power to close the Lake Oahe EFRDs in the advent of a power failure.
 - b. The DAPL has backup power to the communication system but not electrical power to the valve actuator.
5. DAPL's EFRDs are capable of manual closure, however, travel to the remote, unstaffed location of the EFRDs, particularly in winter conditions, should be measured in hours and included in the WCD.
6. The WCD does not incorporate other factors called for by industry best-practices, such as including the time to interpret or verify data, check for false alarms, or the human factors of decision-making under the stress of a possible emergency shutdown.
 - a. Pipeline Industry safety standards require evaluation and decision-making by a pipeline controller where leak detection systems such as CPM systems are in an alarm state indicating a possible commodity release.

³⁹⁹ Holmstrom Report at 42.

- b. DAPL's leak detection system does not automatically shut down the pipeline - this requires human decision-making and action that is often fraught with human error.
 - c. API RP 1130, Computational Pipeline Monitoring for Liquids (2007), for example, requires such an evaluation for other factors. RP 1130 has been incorporated into DOT regulations by reference. This factor must be included in WCD shutdown time. However, DAPL's WCD calculation includes no time for detection generally and none for issues related to spill identification and shutdown decision-making.
7. Software-based leak detection systems are notoriously unreliable.
- a. A 2012 PHMSA study examined the agency's spill database and found that CPM systems detected hazardous liquid leaks in the pipeline rights-of-way (ROW) only 20% of the time.
 - b. Similar leak detection performance can be seen by a review of ET's pipelines in the PHMSA database from 2010-18.
 - c. Like the PHMSA study, more ET spills in the ROW were identified by random members of the public than were identified by SCADA or CPM systems.
 - d. To address this serious industry performance issue, API issued Recommended Practice 1175, Pipeline Leak Detection Program Management (2015), requiring in its RP that pipeline operators evaluate their own performance by establishing leak detection metrics for continuous improvement.
 - e. There is no record that Dakota Access has identified its leak detection record as a problem or evaluated its past data and established metrics to improve performance under this important standard.

The SRST technical team has repeatedly requested from the Army Corps and Dakota Access for the 2016 DAPL source documentation that relate to its spill model calculation and to allow the team to compare this calculation to the PHMSA formula. Neither the Army Corps nor Dakota Access have responded affirmatively to this request, including requests to examine metrics related to DAPL pipeline emergency shutdown response time for leak detection - both of which are reliant on a CPM system and human performance.

Dakota Access and the Army Corps have also lacked transparency in providing the Tribes and their experts with any performance testing of the DAPL CPM leak detection system as provided in API RP 1130, including actual and simulated crude oil removal.

DAPL SPILL MODELING IS INVALID

A spill model is an analytical tool that tells you what will happen to the oil and its impacts once it is spilled. A valid spill model is essential to assessing the risks associated with pipeline discharge.

1. Dakota Access' spill models are invalid. DAPL spill models assumed a WCD that has been significantly underestimated. The technical spill model is only as valid as the assumption of the WCD.

In the case of the 2018 spill model supposedly used in the *Analysis of Issues*, the Army Corps stated that the model incorporated the deficient WCD produced by Dakota Access. The fact that Dakota Access grossly understates the WCD in the information supplied to the spill model developer invalidates the model's ability to address emergency response planning and reliably predict spill impacts.

Dakota Access' failure to develop an accurate spill model means that critical information is missing from oil spill response planning efforts. These serious deficiencies include important information concerning the magnitude of hazards faced by emergency responders, the geography of areas impacted by a spill, and the number and type of equipment needed by emergency responders. Dakota Access' failure to develop a valid spill model and response plan concerning Lake Oahe – an HCA – is particularly concerning, especially because Dakota Access' corporate parent, ET, has the worst safety spill record in the industry.

In addition to dramatically underestimating the WCD, the 2018 DAPL spill model indicates that a Bakken crude oil spill will only remain on the surface of Lake Oahe for a few hours and then become immersed in the water column.

2. The remediation of crude oil spills immersed in the water column is very difficult.

The DAPL Geographic Response Plan (GRP) for Lake Oahe, however, focuses on a cleanup that assumes the oil will persist on the lake's surface. In other words, Dakota Access has developed a spill model that underestimates the magnitude of a WCD into Lake Oahe and acknowledges that a spill would only remain on the surface of Lake Oahe for a few hours before becoming immersed in the water column. However, Dakota Access has developed a response plan for Lake Oahe that focuses on surface - not water column - cleanup efforts. Dakota Access' Lake Oahe response plan is fundamentally at odds with its spill model, deficient as it is.

Doubling DAPL's volume throughput would only compound the gravity of a spill, resulting in potentially catastrophic impacts on the Tribes and on the land, plants, animals, and water on which they rely.

Regulators, first-responders, impacted parties such as the Tribe, and Dakota Access itself need to see a spill model that reflects realistic risks and can guide effective response efforts based upon an accurate WCD and what would be the increased spill impacts from a doubling of DAPL flow.

Without a valid spill model that answers the following questions, it is impossible to plan effective response efforts. Dakota Access should also provide the corresponding documentation to the Tribe's experts for evaluation for the EIS. Without a valid spill model that answers the following questions, it is impossible to plan effective response efforts:

1. Has Dakota Access updated their WCD calculation compliant with PHMSA and industry standards for the proposed doubling of the DAPL flow?
2. Has Dakota Access revised the spill model to include the updated compliant and more accurate WCD? Has Dakota Access updated their Geographic Response Plan to be consistent with the 2018 spill model conclusions and revised WCD for the doubling of the DAPL flow?

3. Does a release under the lakebed of Lake Oahe present a more difficult problem with cleanup and the threat of a persistent source of contamination 90-feet below the lakebed to groundwater and the Missouri River system? Is there a plan for that remediation?
4. What is Dakota Access' plan for cleanup for Bakken crude that is immersed in the water column in Lake Oahe?
5. Has Dakota Access researched and incorporated in the GRP recent research on technologies for the cleanup of crude spills immersed in the water column?
6. How does the model impact the operation of the Lake Oahe dam and the Lake Oahe Master Manual?

This information is critical because it tells responders what will happen in the event of a spill so they can respond appropriately—i.e., where to focus their initial efforts, where to place booms, and what specific sensitive ecosystems and cultural resources may be in immediate harm's way.

RISK MANAGEMENT CONCERNS

The DAPL Lake Oahe crossing is considered under PHMSA regulations to be an HCA. As an area where a spill can have significant environmental and human health consequences, Lake Oahe requires increased measures for protection. These include effective risk reduction, an IMP that is pipeline segment specific, and the application of up-to-date pipeline safety standards. **Dakota Access' risk management approach for Lake Oahe has failed in all these areas.**

Risk management in part looks at what can happen and what can be the consequences. The significant underestimation of the WCD has potential consequences that is a serious risk management deficiency. Lacking effective risk management, doubling the capacity of DAPL is an even more serious threat to the people and the environment of Lake Oahe.

The *SRST Remand Report* asserts that the Army Corps continues to dismiss the true significant risk of a major spill in the Missouri River. The Army Corps' *Analysis of Issues* report failed to resolve ongoing controversy relating to the failure to apply modern pipeline risk management consensus standards. The *Analysis of Issues* also failed to address poor spill performance; application of ineffective safeguards; the use of generic risk data rather than incorporating ET's prior worst-in-class spill performance including failing to detect leaks in its pipelines; the risk posed by the lack of back-up power to the electric motors that close the Lake Oahe emergency shut-off valves; and the risk of catastrophic pipeline failure from ineffective overpressure protection as PHMSA cited ET for such protective measures in June 2021.

The Army Corps' determination of low risk in the EA, its *Analysis of Issues*, and now in the PDEIS, includes the same assertions – with no supporting evidence – that the pipeline lies underneath the riverbed in a totally confined geological formation. In fact, their own description of the geology and landslide risk is at best contradictory and core sample data supplied in the EA undermines their assertion.

Dakota Access committed itself in the Final DAPL EA and Mitigated FONSI to “construct and maintain the pipeline to meet or exceed industry and governmental requirements and standards.” However, Dakota Access has failed to implement key recently issued API pipeline

standards that have been implemented specifically to prevent the number of spills companies like ET have been experiencing.

For example, API RP 1173 Pipeline Safety Management Systems (2015) is seen as the best practice approach to risk management and spill prevention. RP 1173 is a risk analysis methodology that focuses on actual performance using a Plan-Do-Check-Act approach to achieve continuous assessment and improvement. For effective pipeline risk management RP 1173 would have ET assess and continuously improve its own spill performance. **ET's PDEIS, however, in assessing the risk for DAPL, cites generic PHMSA statistics rather than examining the real risk of its own poor safety record.** ET is not utilizing the RP173 modern management system approaches for spill prevention that include requiring risk reduction, implementing corrective action, and using metrics to drive incidents to zero. API RP 1175 in addressing leak detection systems requires using metrics to improve detection improvement, but that recommended practice has not been adopted by Dakota Access for Lake Oahe.

With a spill and leak detection record of serious concern, Dakota Access' failure to adopt standards that aim to improve that performance - particularly where doubling the impact is being considered - is deeply concerning.

Additionally, there is no record of Dakota Access applying a needed Management of Change review to assess the safety implications of doubling the DAPL throughput. This analysis is required for such a change under API RP 1173 and API RP 1160 Managing System Integrity for Hazardous Liquid Pipelines (2019).

RP 1160 states that an increase in throughput should also trigger an evaluation of its impact on the Integrity Management Plan (IMP). It notes that such changes can impact the safety of the pipeline's maintenance, operations, monitoring, integrity management including the magnitude and velocity of pressure surges, corrosion susceptibility, and leak detection.

During the NDPSC hearings on Dakota Access' request to double the DAPL volume throughput, the SRST's technical experts encouraged the commission to request and thoroughly evaluate these important reviews required by modern pipeline safety standards. It is unknown whether the NDPSC ever conducted such a review.

Finally, and perhaps most concerning, is that there is no record of Dakota Access implementing an up-to-date IMP as required by PHMSA and as cited in their NOPV issued to ET in June 2021.

An effective IMP is a vital risk management element. Under PHMSA regulations, an IMP must be pipeline segment specific – in other words specific to the DAPL. An IMP was requested from Dakota Access in the Army Corps' Environmental Assessment. In a court-ordered independent assessment, the DAPL IMP was not found. There was a generic IMP document, but it lacked any DAPL specific content as required by the regulation for HCAs.

IMPs are a key requirement developed by PHMSA to prevent hazardous liquid releases in HCAs. A lack of a compliant plan is a serious issue and doubling the flow of DAPL by a company that would operate a pipeline at any time without such a plan is a danger to the public and the environment. The NDPSC should have requested from Dakota Access evidence they had implemented the key API best practices referenced, the detailed DAPL pipeline segment specific IMP, and any method of characteristic (MOC) for the DAPL throughput increase, including specific safety changes made because of the MOC hazard evaluation.

The NOPV PHMSA issued in June 2021 demonstrates that the NDPSC should never have granted Dakota Access approval to double the volume of the DAPL.

MOC is a type of modeling that predicts pressure and flow rate oscillations (e.g., surges) in a pipeline, and are otherwise known as “transients.” Transients occur in pipelines and other control systems operated in processes vital to societies’ resource utilization worldwide. Accurate modeling of the transient phenomenon enables efficient and safe operation which reduces costs, the occurrence of accidents, and the likelihood of adverse environmental impacts. Water hammer (or, more generally, fluid hammer) is a transient pressure surge or wave resulting when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). Water hammer commonly occurs when a valve is closed suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe.

Before being allowed to double the throughput of DAPL, Dakota Access should have had to adduce some evidence demonstrating that it is taking appropriate corrective actions to improve on ET’s poor safety record. Yet Dakota Access has failed to do so, and the Army Corps hasn’t demanded to see evidence of action.

Dakota Access’ spill model, response plan, and general approach to risk management along DAPL, and particularly the DAPL crossing at Lake Oahe, fail to meet regulatory and industry standards. It is concerning that Dakota Access was permitted to double DAPL’s capacity despite these failings and that the Army Corps’ PDEIS failed to even make mention of it considering ET’s abysmal safety record.

TOXICITY OF BAKKEN CRUDE OVERLOOKED

The *SRST Remand Report* states the Army Corps’ *Analysis of Issues* report continued to ignore the serious hazards of Bakken crude as detailed in their 2018 *SRST Spill Report*. **Bakken crude is a deadly mix of highly toxic industrial chemicals.** It is recognized as having physical and chemical characteristics that create elevated hazards of significant and acute adverse health effects. Toxic components of Bakken crude such as BTEX and PAHs have compounding effects that pose even greater hazards than the individual components. In addition to health concerns, **Bakken crude poses serious safety risks with a flammability much closer to gasoline than other common varieties of crude oil. These issues and the dangers this poses to public health and emergency responders in the event of a spill has been ignored by the Army Corps.**⁴⁰⁰

Furthermore, the *SRST Remand Report* states that the Army Corps’ *Analysis of Issues* report examined the impacts of benzene, using only grossly understated spill volumes, an unrealistic WCD, and modeled only one river flow to determine mean discharge. The Army Corps used benzene concentrations based upon 2010 Marathon Oil data of 0.28% benzene content. Other analyses suggest that the Bakken crude oil concentration is 2% benzene, and 15% total BTEX, thus posing a certain risk of contamination above the maximum contaminant level (MCL).

According to the *SRST Remand Report*, in a permit application by Marquis Missouri Terminal LLC to construct a crude oil storage and receiving facility, Marquis reported that the oil was expected to contain toluene, xylene, benzene, and hexane—all volatile organic compounds (VOCs). The estimated maximum weight of each component in the oil was 5%, 5%, 2%, and

⁴⁰⁰ *SRST Remand Report* at 26.

3%, respectively, for a maximum total of 15% of the oil by weight. Even DAPL's own Safety Data Sheet (SDS) for Bakken crude attached to the Facility Response Plan (FRP) states that benzene is 1% or less by volume - much higher than the Marathon Oil benzene data - and contradicts the EA.⁴⁰¹

Referring to the Army Corps' *Analysis of Issues*, the *SRST Remand Report* calls out the Army Corps' erroneous conclusions on the chronic effects and toxicity of Bakken Crude. Nevertheless, the DAPL response plans and Final EA and PDEIS identify the crude oil health hazard as "slightly hazardous" and that it "may contain benzene, a carcinogen." The DAPL SDS health hazard GHS⁴⁰² classification lists Bakken crude as "toxic to aquatic life with long lasting effects," again contradicting the EA⁴⁰³ and now, the PDEIS. The *SRST Remand Report* states:

"The specific hazards of the Bakken crude oil that could be released is central to understanding the spill impacts but the Army Corps and DAPL documentation contradicts itself. Additionally, the EA-cited analysis assumes "complete and instantaneous mixing" which would not be the results from an actual spill model. The conclusion based upon these faulty assumptions is that such a spill would not reach the acute toxicity threshold for aquatic organisms. Consequently, the conclusion of no impact to Tribal hunting and fishing rights is erroneous.

Page 9 of the Analysis of Issues demonstrates the Corps' failure to properly identify the acute risk to aquatic life from benzene. The U.S. Geologic Survey (2006) cites literature showing that, "Results from the crude oil hydrocarbon dissolution study indicate that benzene and toluene concentrations greater than drinking water MCLs may be present in ground water that comes into contact with fresh (unweathered) crude oil from the study area. Releases of crude oil or natural gas condensate at sites in stream valleys may have the greatest potential for benzene and toluene contamination of ground water because of the shallow depths to ground water commonly found at these sites." (Rixey and others, 1999).

In identifying the potential human health impacts to exposure from the Bakken crude transported by DAPL, the Corps only considered benzene and only at levels exceeding the MCL. That is the wrong measure, because there is no safe exposure to benzene, which is a highly potent carcinogen. The MCL is not a health-based standard, in that it includes a consideration of what is technically feasible; the MCL Goal or MCLG is the health-based standard, or 'no risk' level. For benzene, EPA has set the MCLG at zero, acknowledging that there is no safe or 'no risk' level of exposure. Moreover, Standing Rock has expressed concern that toxic crude components can have compounding effects, and Bakken crude has a greater concentration of BTEX, which, for example, was not addressed.

The Analysis of Issues report discusses a spill model run with other Bakken crude components but fails to provide results or conclusions. The model described in the Analysis of Issues (if it even exists) does not identify the

401 *Id.*

402 Globally Harmonized System (GHS) is a grouping convention that divides hazards into three major groups - health, physical and environmental. Class is the term used to describe the different types of hazards. For example, gases under pressure are an example of a class in the physical hazards group.

403 *SRST Remand Report* at 26.

incidence of important toxic contaminants in Bakken crude oil, and any conclusions relating to human health are erroneous.

The Corps states on pages 31-32 of its report "Overall, the maximum Total Hydrocarbon Concentrations (THC) were in excess of the thresholds for predicted biological effects." Yet the Corps tries to undermine any conclusions that could be drawn arguing the duration of exposure would be "relatively short" with no explanation or justification for the assumption. The Corps has recognized elsewhere that weather and ice cover conditions can impact the concentrations and potentially the duration of exposure. In the Analysis of Issues, the Corps baldly asserts that any effects would likely result from acute effects rather than chronic exposure over time. The report is over simplistic in stating that mortality is a function of duration of exposure.

The Corps fails to address chronic or systemic effects on the ecosystem. For example, what if the spill kills all the plants (not even considered in this model), and then the next winter when the river ices over there is not enough oxygen and the fish die. This model is all based on LC50 endpoints, which is the least sensitive endpoint of all.

As for human health, the Corps cites outdated data. The citation to O'Reilly et al is an unpublished API report, nearly 20 years old. Its findings have been challenged by a more recent U.S. Geologic Survey (2006) analysis reporting that both Benzene and Toluene can occur at levels exceeding the MCL, and that this indicates that all BTEX chemicals may be present in drinking water, and at levels greater than the MCL. There is more recent peer-reviewed data predicting the effect of hydrocarbon and hydrocarbon-impacted soil on groundwater, petroleum hydrocarbons in soil and ground water at Big South Fork National River and Recreation, Tennessee and Kentucky."⁴⁰⁴

05.2.3.5 P-PIC "Audit"

Judge Boasberg's ruling on June 14, 2017 remanded the Army Corps to correct the NEPA deficiencies in the EA.⁴⁰⁵ In a subsequent opinion issued on December 4, 2017, the court reaffirmed that it had the authority to impose conditions on the pipeline during the remand and found conditions warranted considering the risk of an oil spill that could "wreak havoc on nearby communities and ecosystems."⁴⁰⁶

Although the D.C. District Court ordered Dakota Access to select an independent auditor "in consultation with the Tribes," and to complete the audit prior to April 1, 2018, Dakota Access selected an auditor over the Tribe's objections, unilaterally dictated the scope of the audit, and conducted it behind closed doors to thwart the Tribe's request for an "independent third party" audit to address implementation of permit conditions and "other integrity threats."

After the court's order, the Tribe did not hear anything further on the matter until January 11, 2018, when the Tribe's attorney (Hasselman, Earthjustice) received an email from Dakota Access' counsel suggesting three companies that Dakota Access proposed to conduct the audit. After consulting with the technical team, the SRST responded that the three

⁴⁰⁴ SRST Remand Report at 27-28.

⁴⁰⁵ *Standing Rock*, Doc 239 (June 14, 2017).

⁴⁰⁶ *Standing Rock*, 280 F. Supp. 3d 187 (D.D.C. 2017).

companies—all with close ties to Dakota Access' parent company, ET, the project itself, or the industry generally—could not act as an "independent third-party."

Dakota Access did not respond to the Tribe's input or invitation to further discuss the scope of the audit. The Tribe did not hear anything further on the matter until February 20, 2018, when the auditor recommended by the Tribe called several Tribal representatives expressing frustration that he had been asked to review thousands of pages in a short amount of time and submit a proposal as part of an RFP process. The Tribe's attorney again contacted Dakota Access' counsel to relay this information and inform them that the Tribe intended to respond to the auditor's messages to clarify the process.

The email to Dakota Access' counsel again invited a conversation around the "scope and process" of the audit. The response received from Dakota Access' counsel rejected that invitation to discuss the audit, stating that the Judge's Order requiring review of "integrity threats" did not include the Tribe's concerns with Dakota Access' risk analysis and other technical information.

On Feb. 28, 2017, the Tribe learned that Dakota Access had unilaterally decided against hiring the Tribe's proposed independent auditor, presumably meaning that Dakota Access would be going ahead with one of its proposed auditors on a highly accelerated timeline that the Tribe had previously deemed unacceptable.

On March 2, 2018, SRST's counsel asked the court for clarification.⁴⁰⁷ Through counsel, the technical team expressed deep concern about the lack of independence in the process, particularly given that the auditor proposed by the Tribe had been rejected and the one unacceptable to the Tribe had apparently been selected. Additionally, **the technical team stated that in any conventional audit situation, protocols and standards are worked out by the involved parties in advance.** The scope of any safety audit needs to be defined with precision, i.e., what is the question that the audit seeks to answer?

Equally important, the "rules" governing the parties' participation need to be established. For example, are there rules governing *ex parte* contacts between the auditor and the involved parties, or do all communications with the auditor need to be transparent? What are the steps the auditor will go through to collect information, and who has rights to share information at what times? Does any party have an opportunity to review a draft and provide comments?

Without a clear scope and without clear protocols, Dakota Access construed the court's December 4, 2017 order to leave it entirely in charge of determining the question to be answered by the audit, and to allow it to freely engage with the auditor while shutting the Tribe out of the process. Dakota Access (and the Army Corps) again demonstrated their disregard for meaningful consultation.

The Tribe's counsel raised concerns that:

"There are no safeguards to protect against an unfair process or to assure that any adverse findings find the light of day. The result of this could well be an audit that is not just useless for its intended purpose—to provide an independent review on whether the pipeline is as safe as Dakota Access claims—but one that misleads the [C]ourt and the public, in a manner that could harm the Tribe's interests."⁴⁰⁸

⁴⁰⁷ *Standing Rock*. Case 1:16-cv-01534-JEB Document 336 (Mar. 2, 2018).

⁴⁰⁸ *Id.* at 17.

Accordingly, the Tribe asked the court to specifically provide additional clarification regarding the third-party audit. It didn't happen.

On April 2, 2018, the Tribe received notice that Dakota Access had submitted the audit to the D.C. District Court. The so-called "DAPL audit" titled *Independent Assessment of Dakota Access Pipeline U.S. Army Corps of Engineers Easement Special Conditions*, conducted by Process Performance Improvement Consultants (P-PIC) identified the DAPL easement conditions and associated PHMSA regulations. **Its conclusions, however, were based entirely on interviews with ET/Sunoco personnel, information provided by the third-party contractor environmental inspectors ("President of Perennial Environmental Services," who prepared the EA) and unnamed "manuals or other documents." An actual compliance audit never seemed to have been conducted.**

Even with Dakota Access' attempt to undermine the Tribes' participation in the selection of an independent third-party auditor and to control the audit process, the audit still documented multiple examples of non-compliance with easement conditions.

For example, the audit revealed that DAPL had not complied with easement conditions requiring that it submit its risk assessment and an operations and maintenance ("O&M") manual to the Army Corps.⁴⁰⁹ Indeed, the DAPL-specific documentation required by the easement simply does not exist, even though required by federal law for HCA sites (49 C.F.R. §195.452(f)). While the Tribe pointed out DAPL's noncompliance with the easement, the Army Corps never took any action.

The audit also documented that **ETP/Sunoco violated Easement Condition No. 2**, which requires that it construct the HDD crossing in accordance with a previously submitted HDD plan. The President of Perennial Environmental supposedly reported to P-PIC via phone that **during HDD drill and boring, there was an illegal spill of mud from behind a containment berm.**

"GeoEngineers documented the execution of the horizontal directional drilling operation... An environmental inspection report dated March 15, 2017, noted that mud had breached containment berm at mud disposal site 1804. The March 15, 2017 inspection report noted that clean-up activities were in progress. The report noted that the discharge did not impact any water features and further states that the Environmental Control Devices (ECD) that had been installed performed as expected and helped prevent migration of the drilling mud to the water."⁴¹⁰

Thus, at some point prior to March 15, 2017 during construction of the HDD of the Lake Oahe crossing, there was **an unauthorized migration of drilling mud that had been collected. No quantity of fill was known, or whether there were any contaminants in it. Had it affected water, it would violate Section 404 of the Clean Water Act. The inspection report apparently states that it did not affect water, but there was no way of verifying that. This spill was an audit failure and was hidden from the Tribe and Judge Boasberg.**

The report also acknowledged that:

"Discharge of hydrostatic test water occurred once, after the post-pull hydrostatic test. Water from the pre-pull hydrostatic test was used to mix

⁴⁰⁹ Process Performance Improvement Consultants, LLC (P-PIC), *Independent Assessment of Dakota Access Pipeline U.S. Army Corps of Engineers Easement Special Conditions* at 7. (March 29, 2018).

⁴¹⁰ *Id.* at 4.

*drilling mud. The documentation that was presented indicates that the grantee had a permit to discharge hydrostatic test water from the State of North Dakota, Permit NDG070568.*⁴¹¹

However, despite holding a permit from the State of North Dakota, under Easement Condition No. 3, **“the Grantee (Dakota Access) was not authorized (by the Army Corps) to discharge hydrostatic test water under the easement.”**⁴¹²

Below is an extensive outline that lists the issues that includes numerous errors, omissions, and a complete lack of due diligence the SRST technical team and another independent auditor detailed regarding the P-PIC “audit” concluding that:

1. The North Dakota Department of Health or the Army Corps should be contacted and ensure they have information reported regarding violations occurring at the HDD as reported from the field.
2. ETP/Sunoco did not pass the audit, and it should be held accountable.
3. The Army Corps should also be held accountable for failing to notify the Tribe of violations of the terms of the easement.
4. **It should be noted that the report acknowledges on page 4 that “Environmental reports were filed by Perennial Inspectors” – the same consulting firm that prepared the Environmental Assessment for ETP/Sunoco and lists ETP as a client on their website (Army Corps of Engineers - Omaha District, *Final Environmental Assessment, Dakota Access Pipeline Project, Crossings of Flowage Easements and Federal Lands*, p. 126-127 (2016)). This raises the potential for bias in the environmental inspection reports and the likelihood that a conflict of interest existed.**
5. The report found that **ETP also violated Easement Condition No. 9**, requiring the filing of all requisite plans to the Army Corps. The report states on page 6-7:
 - a. *“Operations and Maintenance Manual... We were unable to locate correspondence or other documents supporting that this requirement was met.”*
 - b. *Risk Assessment (Integrity Management Plan) ... We were unable to locate correspondence or other documents supporting that this requirement was met.”*
6. The report also found that **ETP violated Easement Condition No. 11**, requiring the submittal of final as-built drawings to the Army Corps:
 - a. *“We were unable to locate correspondence or other documents supporting that this requirement was met.”*
 - b. *“Thus, ETP/Sunoco violated at least three of the 39 easement conditions imposed by the Army Corps”*
7. Significantly, the report states on page 7:
 - a. **“An email dated February 7, 2018, shows that an update of the Spill Model Report**

411 *Id.*

412 *Id.*

was sent to the USACE [sic Army Corps].”

- b. “The Tribal Council met with Col. Hudson and his staff from the Omaha District on March 26, 2018, and a request was made for the most recent Spill Model.”
 - c. “Col. Hudson refused to release this information, and the district counsel, Tom Tracy, **stated that the Army Corps need not divulge any additional information** because of the confidentiality agreement filed in the litigation.”
8. The report documents **no instances of verification by the auditors** – which is the very purpose of an audit. It relies upon the word of ETP/Sunoco executives and personnel for its conclusions. For example:
- a. “Condition #4 (Spill and Stormwater Prevention during construction) ... Compliance with the easement condition was confirmed verbally by Perennial’s President...” (p. 5).
 - b. “Condition #21 (Valves)... Confirmation that valves are not located within the flood plain was provided by the Operator’s Project Manager.” (p. 13).
 - c. “Condition #22 (SCADA system) ... Compliance with this easement condition was confirmed by interviews with the Operator’s Control Center personnel.” (p. 14).
 - d. “Condition #23 (Computational Pipeline Monitoring Leak Detection) ... Compliance assessment with this easement condition was confirmed by interviews with the Operator’s Control Center personnel.” (p. 15).
 - e. “Condition #24 (Minimize impacts on soils) ... Compliance with the easement condition was confirmed verbally by Perennial’s President.” (p. 15).
 - f. “Condition #27 (Interference current surveys) ... Per the corrosion control manager, in the Lake Oahe area, the Operator has installed real-time monitoring systems for measuring AC, D.C. interference.” (pp. 17-18).
 - g. “Condition #34 (Training exercises) ... Per the operator, for the 2016 exercise, notification was provided to the ACE.” (p. 22).
9. Many other conditions and regulations were **deemed in compliance based upon ET/Sunoco’s own writings or manuals, with no verification of performance. For example:**
- a. “Condition #1 (Construction per specs) ... The construction of the pipeline was in accordance with the construction specifications... This document also contains the required records for proof that construction was in accordance with the regulations and specifications.” (p. 3).
 - b. “Condition #15 (Pressure tests) ... A thorough review was performed of pressure test records.” (p. 10).
 - c. “Condition #16 (Assessment of test failures) ... Compliance with this condition is evidenced by a memo created by the Wood Group dated 3/6/2018.” (p. 10).
 - d. “Condition #17 (Coatings for trenchless installation) ... Compliance with the easement

condition is evidenced by the Operator's Plant Applied External Fusion Bonded Epoxy Pipe Coating Specification." (p. 10).

- e. *"Condition #18 (Pipe coating)... Compliance with the easement condition is evidenced in the Operator's pipe coating specifications." (p. 11).*
 - f. *"Condition #25 (Overpressure protection control) ... Compliance with the easement condition is evidenced by a surge analysis, which was conducted by Fluid Flow Consultants, with a report issued on June 2, 2017." (p. 16).*
10. If the conditions where reliance is based solely on ETP's word, or its manuals or contractor's reports are deleted, there was very little compliance that has been objectively verified. The location of valves outside of the floodplain is a good example – the report relies upon specifications, when it would have been easy to verify that through manual inspection. There appears to be no verification of anything.
 11. The report was clearly rushed. It contains numerous typographical errors.
 12. Per the operator... (it) appears this condition (training and drills) will be met, including requests for participation of all key stakeholders (federal, Tribal, state, and local).
 13. The authors of the report clearly never saw Chairman Faith's correspondence, which **expressed frustration with the disrespectful manner that ETP/Sunoco has treated the Tribe.** The only other reference to the Tribe is on page 23 regarding the court's requiring the audit and the selection of an independent third-party auditor in cooperation with "the Tribe."
 14. The operator was not able to access local boat ramps on tribal property south of the easement, however, there are a number of **boat launching sites** on the east and west sides of **Lake Oahe that are available for year-round access.**
 - a. Of course, anyone familiar with Lake Oahe knows that no boat dock is subject to year- round access, especially during periods of drought. This highlights the very shallow nature of the report. Few of the conclusions are supported by evidence; most conclusions require faith in ETP/Sunoco's word. This document simply cannot be called an audit.
 15. **Compliance with numerous conditions and PHMSA regulations was determined based solely on ETP/Sunoco's verbal assurances. This is not how any audit is ordinarily conducted.**
 16. The **report does identify many other documents that should have been made available to the Tribe,** including:
 - a. Lake Oahe Supplemental Documents, including design specifications
 - b. March 15, 2017, Environmental Inspectors' Reports and Daily Field Reports
 - c. Pressure test results
 - d. HDD construction plan

- e. HDD contingency plan
- f. Updated Spill Model provided to the Army Corps of Engineers on February 7, 2018
- g. Operations and Maintenance Manual
- h. Updated Integrated Management Plan (Note: As of July 22, 2021 PHMSA Notice of Violation, the IMP had not been updated. P-PIC audit stated IMP would be completed in April 2018; PHMSA).
- i. Welding Daily Inspection Reports
- j. Bonded Epoxy Pipe Coating Specifications
- k. Post Construction Coating Survey
- l. Surge analysis report
- m. Initial inline inspection survey.

17. The scope of the DAPL pipeline audit as ordered by Judge Boasberg was “to review easement conditions and regulations, and to assess compliance with all such conditions as well as other integrity threats.” The audit, however, only reviewed the easement conditions and did not look at a number of relevant regulations and “other integrity threats.” Judge Boasberg’s audit scope was not met. Some issues not examined include human factors regarding reliability, leak detection effectiveness, incident investigation, ETP/Sunoco previous history of serious spills, previous audits, adequacy of procedures, safety performance indicator trends, safety culture assessments, landslide risks, high consequence flood plain impacts, cyber security, etc.
18. The review did not conform to recognized third-party audit norms and violates industry standards for third party audits, lacking for example independence, fair presentation, impartiality, openness [ISO/IEC 19011(4.0) and ISO/IEC 17021(4.0)], and vital report components such as conclusions, recommendations, and actionable corrective actions (API RP 1173, 10.2.6).
19. The website of the auditor selected by Dakota Access – Process Performance Improvement Consultants (P-PIC) – describes their significant involvement in litigation support for oil and gas firms: “Litigation, Auditing and Due Diligence: We support energy pipeline and service companies and their counsel in the defense of their company, their management and their business practices in litigation through use of our experience and knowledge of industry practices, serving as expert and consulting witnesses through our parent company, The Blacksmith Group.” P-PIC is an industry defense firm lacking any independence, fairness, or impartiality.
20. The purpose of a pipeline safety management system audit is risk reduction and continuous improvement – since the audit lacked proposed corrective action, it failed its basic purpose (API RP 1173, 5.6).
21. The auditors did not provide an opportunity for the SRST to share relevant information although U.S. District Judge Boasberg’s December 3, 2017 opinion stated the need to

do so. “Yet the Tribes, in fact, only requested that they be permitted to participate in the selection of the auditor and have the opportunity to share their relevant data during the audit process. This seems reasonable.” (Opinion at page 7). The Tribe lacked any real input into the selection of the auditor or the audit and thus Judge Boasberg’s conditions were not met. This also fails the “openness” requirements of good practice safety and environmental audits.

22. DAPL key audit findings were based upon a cursory paper exercise or conversations with personnel that was not verified by an examination of evidence or field verification even though the information was available (ISO/IEC 19011(4.0)).
 - a. **It appears the audit was a check-the-box exercise. Auditing requires a rigorous evidence-based approach that includes verification through “source documentation, conducting additional interviews, or by direct observation” including the use of sampling (ISO/IEC 19011(4.0 f.)).**
 - b. **The audit lacked field verification of the critical leak detection system** [sensors in place, communicating accurately and reliably, calibrated, detecting at the stated detection limit, etc. or for outputs - testing power supply, signal, effective communication to equipment, field exercise trips for effective functioning of pump shutdown and EFRD (emergency flow restriction device) closure, etc.].
 - c. **The auditors only did a paper review of these key conditions, no field verification.** Even there, while the auditors found back-up power, the audit stated the condition was met for the EFRD communication based upon a paper review. The Army Corps, in fact, asked Dakota Access whether the valves could be shut down effectively under adverse weather conditions.
 - i. However, the auditors only checked that backup battery power was available for communication but not that backup power was available for operation of the valves. This is important as electric operated valves are not fail-safe. Another example was the inadequate surge analysis – the audit stated this was not an issue if the EFRD valves were closed slowly.
 - ii. A lack of adequate surge relief can result in sudden pressure and a catastrophic failure of the pipeline.
 - iii. However, this analysis erroneously assumed the pump controllers do not fail or there are no spurious trips of the valves.
 - iv. **The pipeline needs a separate, independent surge relief system which is not available. The audit erroneously credits DAPL’s inadequate system. These DAPL failures render the pipeline high risk.**
23. The Tech Team has uncovered an issue that **DAPL may have used sub-standard pipe from Welspun, an Indian steel pipe manufacturer.**
 - a. Welspun has been implicated in selling substandard pipe in a PHMSA and Plains Justice report on the issue.

- b. We have been told that Welspun's plant in Arkansas can be used for pipe coating but cannot roll 30-inch pipe such as used by DAPL, and the pipe was likely manufactured in India where the substandard pipe originated.
- c. The auditor failed to ask for the mill test reports (MTRs), the history of the pipe and documentation of where the pipe came from. Industry codes are said to demand traceability and each section of pipe has an MTR # on it.
- d. Despite the extensive publicity concerning Welspun's defective pipe, this issue was not specifically examined by the auditor.

Despite the exhaustive and detailed technical team critique of the P-PIC "independent assessment," Judge Boasberg essentially ignored the technical team's analysis and considered Dakota Access in compliance with his December 4, 2016 order. Two weeks after the report was submitted, on April 16, 2018, the court concluded:

*"The Tribes believe that there has not been enough consultation regarding the response plan, that Defendants have not provided them with the relevant information they believe necessary to evaluate the proposals, and that the expert is not sufficiently independent. Yet even were the Court empowered to manage the process at the level Plaintiffs seek, **the issue is now essentially moot.** As required by the Order, both the oil-spill response plan and the audit have now been submitted, and Dakota Access has complied with its bi-monthly reporting requirements. Although the Tribes may disagree with the process, Dakota Access has complied with the Court's directive."⁴¹³*

05.2.4 Environmental Justice

05.2.4.1 Proper Assessment Requires Consideration of Externalities

Environmental Justice (EJ) is "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."⁴¹⁴ Fair treatment means that, "no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies."⁴¹⁵

The 2016 *Promising Practices Report for EJ methodologies in NEPA Reviews* by the Federal Interagency Working Group on Environmental Justice (EJ IWG) identifies guiding methodologies and principles for: meaningful engagement, scoping process, defining the affected environment, developing and selecting alternatives, identifying minority populations, identifying low-income populations, impact analysis, and disproportionately high and adverse impacts.⁴¹⁶

413 *Standing Rock*. Document 352 (Apr. 16, 2018).

414 United States Environmental Protection Agency. *Environmental Justice* (2018). Available at: <https://www.epa.gov/environmentaljustice>. (Accessed on: July 1, 2021).

415 United States Environmental Protection Agency, *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (June 2016); Available at: https://www.epa.gov/sites/default/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf. (Accessed on: July 1, 2021).

416 United States Environmental Protection Agency. Available at: https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. (Accessed on July 1, 2021).

A key part of these EJ methodologies is that the potential environmental impacts encompass both the natural and physical environment and can include ecological, aesthetic, historic, cultural, economic, social, or health impacts to minority populations and low-income populations in the affected environment.

Prior to the Trump-era CEQ rule changes, NEPA required that agencies consider three types of impacts: direct effects, indirect effects, and cumulative effects. Further, an agency's assessment of significant impacts can be informed by considering whether a proposed action may result in an impact with a low probability of occurrence, but with catastrophic consequences (i.e., low probability, high impact event). As discussed in Sections 3.2 and 3.3, the Biden administration has issued a series of executive orders and policy agenda along with the CEQ rulemaking proposal that would restore and re-establish many of the pre-Trump NEPA policy procedures and regulations, including improving how agencies treat environmental justice issues.

According to Dr. Kevin Cahill, an economist with practical and academic experience in social justice issues and a member the SRST technical team, the DAPL presents the quintessential example of a "negative externality," an obvious concern when it comes to environmental justice. A negative externality (also called "external cost" or "external diseconomy") is an economic activity that imposes a negative effect on an unrelated third party. It can arise either during the production or the consumption of a good or service. The pipeline's operations negatively impact the Tribe, and ET presently has no incentive to internalize these costs.⁴¹⁷

Indeed, the environmental justice issues of the DAPL have been raised since long before the Army Corps published its Draft EA for the DAPL and its preference to issue permits for easements that cross beneath Lake Oahe (November 2015). The camps represented the daily physical manifestation of the DAPL as a beacon of environmental injustice. Yet, the issue of the DAPL as an environmental justice issue has been laid bare by the Tribes, their technical experts, the EPA, DOI, and even the Army Corps, all of whom highlighted the issue during the pre- and post-Draft EA process.

The D.C. District Court acknowledged the disproportionate effect on the Tribes, but it was not until Judge Boasberg finally issued a favorable decision on remand of the Army Corps in June 2017 that the environmental justice issue gained the judicial attention it originally deserved.

Judge Boasberg's dissatisfaction with the Army Corps' technical remand analysis, coupled with the Tribes' technical experts poignant, though often scathing criticisms of the Army Corps' "work," led Judge Boasberg to twice rule that deficiencies in the Army Corps' environmental analysis remained. These deficiencies were readily identifiable as significant impacts, thus warranting the EIS.

Just as the *Envy Report* pointed out that the cost differential for construction between the route north of Bismarck and the Lake Oahe alternative were comparable, Dr. Cahill reached a similar conclusion in terms of economic justice, pointing out that the Final EA had failed to appropriately include and weight the social and environmental costs used in the route selection model.

"The Corps of Engineers concluded that the route crossing Lake Oahe is the preferable alternative, as compared to the route north of Bismarck.

⁴¹⁷ Kevin Cahill, Ph.D., *Economics and Environmental Justice* at 78. In SRST. *Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux Tribe*. Report submitted to the Army Corps of Engineers for consideration in the remand analysis (Feb. 21, 2018).

The conclusion was reached, in large part, based on the comparative lower overall costs that ETP/DAPL estimated (**\$232,556,008 v. \$255,122,888**) for Lake Oahe and North of Bismarck crossings. The Corps of Engineers failed to adequately evaluate the route alternatives by omitting the potential catastrophic risks and high costs that could result from operational failures due to an accident, leak, or spill. Based on the figures presented in Table 2-2 in the Final EA, the overall cost difference between the Bismarck and Lake Oahe alternatives is 9.2 percent; an insignificant amount when weighed against the disproportionately higher environmental and social risks of pipeline failure at Lake Oahe.

Ultimately, the impacts of spills and leaks on the Tribe's communities have not been properly addressed for environmental justice issues. While Dakota Access Pipeline and the Corps of Engineers have relied heavily on a comparison of construction costs between the existing route and the route north of Bismarck to justify their route selection,¹⁹⁷ they have failed to adequately quantify and evaluate the social costs of the pipeline's proximity to Standing Rock [Sioux Tribe] Indian Reservation.

There are 567 Federally recognized Tribal Nations today, including an American Indian/Alaska Native population, totaling 5.2 million (1.7% of the total U.S. population), with 2.9 million of those (0.9% of the total U.S. population) identifying solely as AI/AN.¹⁹⁹ American Indians and Alaska Natives rank among the lowest on the socio-economic scale. The overall poverty rate of American Indians and Alaska Natives is the second highest (16%) among all minorities.²⁰⁰ The high school dropout rate for American Indians and Alaska Natives is the second highest of all minorities (11%). At Standing Rock, 19% of the population has less than a high school degree. The poverty rate on the Standing Rock Reservation is conservatively estimated at 43%.

Significantly, the Tribe relies heavily on water from Lake Oahe for all domestic, municipal, and rural water needs. The water from Lake Oahe provides drinking water to almost all homes on the Reservation, as well as the schools, community centers, hospital, and tribal and federal government buildings. It is the source of water for the Tribe's business enterprises (casinos and hotel) and the source of water for irrigation. In the event of a catastrophic spill or even a long slow leak of oil from the pipeline, the Tribe would be without water. The Tribe's Municipal, Rural and Industrial ("MR&I") program estimates that if its intakes on Lake Oahe are shut down due to an oil spill, the Tribe would have 3-days maximum of drinking water.

There are no alternative sources of water. Moreover, an oil spill in Lake Oahe would damage or destroy wildlife, plants, and soil. This can have long-term adverse impacts on Tribal health, as it relates to not only exposure to oil chemicals and contaminants in the water, but also to the food chain.

The Corps of Engineers must fully examine the short-term and long-term impacts of an oil spill on the Standing Rock Reservation. There must be

express recognition that the Reservation suffers the disproportionate adverse effects of a potential oil spill from the Dakota Access Pipeline."⁴¹⁸

05.2.4.2 Erroneous Use of Assessment Methods

The Army Corps' use of an expanded geographic analysis (the boundary intersection method) is basically a population-count analysis to tally impacted minority and low-income populations. This analysis sheds little light on the relevant impacts of a potential spill on the Tribe (e.g., impacts on cultural uses of Lake Oahe). With respect to environmental justice, the *Analysis of Issues* report repeats the same erroneous claims as to low spill risk and that it is "virtually impossible" for an oil spill to reach the waters of Lake Oahe, 92 feet under the lakebed, due to the "overburden." The spill model for DAPL, if it exists, has never been provided to the Tribe or made public. And the little information about the model that has been shared relies almost exclusively on ET/Sunoco's communications of information, making it impossible for the Tribe's consultants to assess how the data was used.⁴¹⁹

The Army Corps concluded in the EA, *Analysis of Issues*, and the PDEIS that impacts to the Tribe's human health would be low because contact would be limited as the public would be alerted in the event of a spill and kept away from Lake Oahe. This argument assumes a low WCD, a quick shutdown of the EFRDs and ignores the possibility of a large spill overtime from a release under the detection limit, under ice, etc. It also seems to make the preposterous claim that signage like, "Keep Out! Toxic Spill" would be an effective mitigation and protection measure. As discussed in Section 5.2.3.3, the report also fails to address the fact that low exposure to some toxic components of Bakken Crude such as benzene is unsafe, and the only safe drinking water exposure is zero. Meanwhile, the secrecy surrounding the spill model and WCD calculations imperils Tribal emergency responders who would most certainly be the first to the scene of a spill.

The Army Corps has consistently tried to devalue the Tribes throughout the NEPA and court proceedings. In one example, the Army Corps summarily dismisses the Tribes' economic concerns by stating that "many of them are outside of the scope of this analysis on remand." In another example from the remand analysis, they make a bold, but unsupported conclusion that, "regarding the SRST positions regarding economic efficiency, theory, and external costs, the Corps finds its analysis is appropriate pursuant to EO 12898 and that the Tribe's critiques do not undermine the Corps analysis."⁴²⁰

05.2.4.3 Erroneous Conclusions on Impacts to Tribal Medicinal Plants

The Army Corps' *Analysis of Issues* report acknowledged that the environmental impacts to Tribal medicinal plants and traditional foods are an environmental justice issue. However, the Army Corps understates the potential impact of an oil spill on traditional plants of the Dakota and Lakota bands. It acknowledges that, "A large unmitigated release of oil near or in Lake Oahe would likely result in mortality of vegetation." Yet, contrary to the facts, the Army Corps stated, "If the time of the oil on vegetation is limited, and best practices for removal are applied, then the impacts would be minimized."⁴²¹

418 *Id.* at 73-74.

419 *Id.* at 50.

420 *Id.* at 83.

421 *Analysis of Issues* at 82.

On January 26, 2015, the Bridger Pipeline released 30,000 gallons of Bakken Crude into the icy Yellowstone River. Only 2,730 gallons of oil were recovered in the subsequent clean-up and remediation – approximately 25,000 gallons of crude oil persisted in the riverine environment. The conclusion that risks to plants of special significance is “minim(al)” is erroneous, considering the difficulty of clean-up of Bakken Crude in freshwater, especially during the winter.

05.2.4.4 Erroneous Conclusions on Impacts to Wildlife and Fish

The Army Corps' *Analysis of Issues* (remand report) acknowledges impacts to wildlife, but boldly asserts, with no analysis, that wildlife, important economically and socially to Tribal members, would seek other sources of water. The analysis, however, fails to recognize that any impacts to wildlife is an environmental justice issue. The analysis of potential impacts to vertebrates appears to be limited to “game” species such as deer but does include considerations of ecosystem impacts. The report further claims that fish are generally unaffected or only briefly affected by an oil spill – “because most oil floats.” However, even the spill model discussion used by the Army Corps shows that under certain conditions oil from a spill will reside under the surface. The report minimizes impacts and concludes that an oil spill would lead to a localized fish kill, “with limited impacts to the surrounding area.”

For fish, the *Analysis of Issues* report also concludes, without persuasive authority, that “even under the unmitigated worst-case discharge scenarios, impacts to fish species would be of limited scale and of temporary duration and therefore impacts to fishing in the area would also be limited.”

The Army Corps then concludes their remand assessment on fisheries with this conclusion:

“Impacts to fishery resources is also considered a low risk as a potential pathway of human exposure. If an oil spill were to occur in Lake Oahe, a fish advisory could be put into place limiting the amount of fish consumption. Based on expected concentrations shown to occur in the majority of the unmitigated scenarios modeled by ETP, it is not likely that a fish advisory would be put in place; if a fish advisory was issued it would be expected to be very short term and localized to the furthest upstream portions of Lake Oahe.”⁴²²

The impact on SRST hunting and fishing rights by the Army Corps then concluded that the risk of an oil spill would be as has been said repeatedly, “low,” and impacts would be of “limited scope and duration.” The discussion of this topic remains puzzling because it is so devoid of technical support and the discussion reads more like legal advocacy than a neutral federal government review. There are a number of other potential high risks, including benzene and xylene exposure levels that exceed the MCL, cumulative BTEX levels that exceed the MCL, and a measurable percentage of elevated risks to aquatic species including fish kills.

05.2.4.5 Conclusion – DAPL Environmental Justice Assessment: A Need for Better Lenses

At the outset of this report (Section 1.2), we emphasized the importance of the fight against the DAPL as a human rights and an environmental policy issue grounded in our

⁴²² Army Corps, *Analysis of Issues* at 88.

Indigenous and human rights to free, prior, and informed consent (FPIC). Throughout this report, we have also discussed how the **DAPL embodies the failure of the Army Corps to account for our recognized rights and their consistent downplaying of its owner as an environmental menace.**

FPIC helps guarantee our right to consent (or not) to development as a basic human rights principle. FPIC is a principle protected by international human rights standards that states, “all peoples have the right to self-determination” and – linked to the right to self-determination – “all peoples have the right to freely pursue their economic, social and cultural development.”⁴²³ Backing FPIC are the UNDRIP, the Convention on Biological Diversity and the International Labour [sic, Labor] Organization Convention 169 (ILO 169), which are the most powerful and comprehensive international instruments that recognize the plights of Indigenous peoples and defend their rights.

To the Army Corps, however, FPIC is either a foreign concept, or maybe just a four-letter word. To us, FPIC is the “gold standard,” not only because it is important for Indigenous peoples, but also because it is good practice to undertake with local communities by involving them in the decision making of any proposed development activity through constructive and transparent engagement.

Global environmental degradation, of which the DAPL is a part, is linked to a worldwide erosion of ethnic identity and cultural diversity, as well as market disruption.⁴²⁴ As biodiversity continues to decline around the world, there is a concomitant decline in the global erosion of ethnic identity and cultural diversity.⁴²⁵ Special precaution is then needed for Indigenous peoples and local communities, especially in projects just like the DAPL where outsiders, agencies, or process professionals control large amounts of the decision-making power, but fail to seriously consider their unique relationship to the land and water resources they have known and protected for centuries. U.S. history is replete with examples of this (See Section 1.2 and Section 2.1).

“Cultures rely heavily on the local environment around them, and local communities play a key role in conserving natural resources. People’s identity, connection with land, and the adaptation of Indigenous and local knowledge are prerequisites for resilience.”⁴²⁶

The precautionary principle, proposed as a guideline in sociocultural, economic, and environmental decision making, has four central components: 1) taking preventive action in the face of uncertainty; 2) shifting the burden of proof to the proponents of an activity; 3) exploring a wide range of alternatives to possibly harmful actions; and 4) increasing public participation in decision making.⁴²⁷

It is one concrete way to frame the concept of “environmental justice,” and can be specific to the context of onshore oil and gas developments, and, more narrowly, to the on-the-ground,

423 Free, prior, and informed consent: protecting Indigenous peoples’ rights to self-determination, participation, and decision-making. Cultural Survival Quarterly Magazine (Dec. 2012). Available at: <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/free-prior-and-informed-consent-protecting-indigenous> (Accessed on: Oct. 22, 2021).

424 Akins, A, Lyver, P.O., Alrøe, H.F., and Møller, H. Review: The universal precautionary principle: new pillars and pathways for environmental, sociocultural, and economic resilience. Sustainability 11: 2357 (April 2019). Available at: <https://doi.org/10.3390/su11082357>. (Accessed on: Oct. 10, 2021).

425 United Nations. *United Nations Declaration on the Rights of Indigenous Peoples*; no. Resolution 61/295; United Nations: New York, NY, USA, 2008; p. 10.

426 Atkins et al. (April 2019).

427 Perry, S. Using ethnography to monitor the community health implications of onshore unconventional oil and gas developments: examples from Pennsylvania’s Marcellus Shale. *New Solutions*. DOI: 10.2190/NS.23.1. d (Apr. 2013).

documented community health impacts experienced everyday by people who are impacted by rapidly expanded fossil fuel development without their FPIC⁴²⁸ Dr. Simona Perry writes:

“Taking an environmental justice approach to the assessment of community health impacts of onshore unconventional oil and gas developments incorporates the public health model of prevention and the precautionary principle. The public health model of prevention focuses on eliminating a threat before harm can occur. This approach shifts the focus from treatment to prevention and demands that affected communities not have to wait for conclusive proof of causation before preventive action is take. The precautionary principle says that if there is scientific uncertainty about the harms posed by an activity, then those proposing that activity have the duty to prevent harm. The burden of proof lies on those who propose to use risky technologies, not those who may be harmed by such technologies.”⁴²⁹

The Army Corps in its EA, *Analysis of Issues*, and now its PDEIS, has relied on a high level of uncertainty surrounding the potential threats of the DAPL to the Tribes’ environment, economy, and the Tribes’ way of life as a reason to avoid taking action to secure and protect the Tribes’ water and natural environment by shutting down the DAPL. However, it is not always possible to have clear evidence of a threat to the environment before the damage occurs. The Army Corps and Dakota Access have repeatedly told the Tribes and the courts that the burden of proof falls upon the Tribes. And yet, time after time, the Army Corps and Dakota Access refuse to provide the Tribes’ experts with the necessary methodologies and data to be able to replicate those analyses in the EA, *Analysis of Issues*, and the PDEIS.

The ability to replicate is also a matter of environmental justice If transparency and truth are the goal in the decision-making process. We believe that all relevant and methodologically sound empirical studies, modeling, and research used in the NEPA process – including the environmental justice assessment used to determine that the risk to Tribes from the DAPL is “low” – should be proven as replicable results that can be trusted. Replication is often upheld as a foundational cornerstone of science and engineering. Direct replications repeat an original study using methods, instruments, and sampling procedures as close to the original as possible.⁴³⁰

Broadly speaking, replication studies that are “direct” assess the “conclusion” validity of the original findings (whether the originally observed relationship between measured variables is reliable). Those original findings might be invalid because sampling error led to a misleading result, or because of questionable research practices, or even fraud.⁴³¹

The issue of environmental justice (or injustice, in this case) has been a predominant issue for the Tribes when their fight began at project inception. In 2017, the D.C. District Court held that the Army Corps violated the law by failing to grapple with the environmental justice implications of siting a major pipeline at the SRST’s doorstep. **On the D.C. Court’s remand, the Army Corps only compounded those flaws, leading to another legal challenge. The Army Corps’ PDEIS continues to ignore these risks, however, and reaches an erroneous conclusion with respect to the impacts of an oil spill from the DAPL on Tribal hunting**

428 *Id.*

429 *Id.*

430 Fraser H, Barnett A, Parker TH, Fidler F. (2020). The role of replication studies in ecology. *Ecology and Evolution*, 10:5197-5207. Available at: <https://doi.org/10.1002/ece3.6330> (Accessed on August 11, 2021).

431 *Id.*

and fishing rights, and environmental justice. Clearly, the Army Corps' *Analysis of Issues*, along with their PDEIS, continues at successfully failing to resolve the environmental justice impacts of the DAPL. The document remains replete with inconsistencies and an erroneous assessment that have been continuously made since the NEPA process was initiated in 2015.

The Army Corps must then be held accountable, and we challenge their narrative. Throughout the entire NEPA process, the Army Corps' decisions have been based on the false prediction that DAPL will not result in significant environmental, economic, and sociocultural harm to the Tribes rather than taking the precautionary approach that it will result in significant environmental harm. And as we have illuminated throughout this report, ET/Dakota Access/Sunoco has a track record that clearly shows their likelihood of causing catastrophic harm to the Tribes and to non-Indigenous communities downstream of the Lake Oahe crossing.

Here, we contemplate:

- + In today's world, the DAPL is an insult that pushes already fragile systems closer to the point of no return. The traditional homelands of the Oceti Sakowin have been weakened by land dispossession, dam development, farm runoff, floods, and the rapid pace of Bakken oil production. The Missouri River may not survive a DAPL oil spill.
- + A catastrophe would not happen if all ET/Dakota Access practiced the precautionary principle.
- + Precautionary policies are cost effective, even for industry, if they can prevent disasters too big to contain.
- + Emergency and "mitigation" measures to deal with disasters should not override precaution for even those must be recognized as insufficient.
- + Precaution means not only preventing disasters waiting to happen but putting a stop to those like the DAPL that are already happening.

In essence, we demand that the Army Corps view the DAPL through a different lens: reciprocity. Reciprocity is a matter of environmental, economic, and social justice. Reciprocity has been the keystone of our people and is the wisdom and knowledge that has been passed down to us by our elders and our ancestors for centuries; that is - if the environment is healthy, people are more likely to be healthy. Equally, if people are healthy, the environment is more likely to be healthy; for both people and the environment to be healthy, their culture and economy must be healthy.

06. CONCLUSION

The DAPL journey has been a long, winding, and arduous one that has left many Indigenous communities on edge, to say nothing of the untold psychological weight of having a project forced upon them while the Army Corps is “just doing their job.” This isn’t happening just at the Standing Rock Sioux Reservation, but wherever relatives may reside. Standing Rock, like Wounded Knee, is more than just a place you locate on a map, unless of course you’re the Army Corps and Dakota Access.

The Standing Rock Sioux Tribe and the allied Tribes have long proven that the Final EA was fundamentally flawed, and far too inadequate for the Army Corps to grant the easement to cross Lake Oahe. The Tribes called up the Army Corps in 2016 to reject the EA for an EIS because the impacts of the project are indeed significant and disproportionately skewed to again impact Indian Country. The courts have fundamentally agreed. But if the PDEIS is any indication, the Army Corps is hell-bent on approving the DAPL across Lake Oahe and legitimizing the currently illegal operations.

There is widespread disagreement among experts regarding the probability of a spill and the magnitude of such a spill. Engineers, biologists, economists, and policymakers are frequently confronted with situations in which experts disagree about the likelihood and magnitude of potential impacts. In such situations, it is necessary to examine outcomes associated with all reasonable conclusions proposed by experts. The Final EA and the remand analysis (*Analysis of Issues*) of the impact of the DAPL on treaty hunting and fishing rights, spill risk, and environmental justice are intricately related and yet the Army Corps, rather than being the arbiter it should be, ignores any environmental, social, or economic implications associated with the DAPL and the consequences of a spill or leak due to an operator with one of the worst safety records in the entire pipeline industry.⁴³²

Now, much like the EA and the remand before it, the Army Corps has released to the Tribes a PDEIS that is again positioning the agency to reissue a decision to issue permits for the easement at Lake Oahe. The questions are:

- + Will the Army Corps, as they told the court, “fulfill its commitment to undertaking an open, transparent, and public EIS process which rigorously explores and objectively evaluates reasonable alternatives?”⁴³³
- + Is the Army Corps, as they also told the court, truly “committed to robust tribal consultations and to actively engaging with the cooperating agencies, which include several Plaintiff Tribes, to produce a thorough and comprehensive EIS?”⁴³⁴

For the answers to these questions to be true, and not an “illusion of truth,” then the Army Corps and Dakota Access would have already committed to a level of openness and transparency that would allow the Tribes’ experts to assess the true impact of the DAPL by making the spill model and other requested data and reports available. So far, that hasn’t happened.

The SRST technical team compiled the list below to emphasize that a transparent and engaged consultation will be the only way to address the issues and gaps in information that would allow for a robust EIS process that the Army Corps purportedly claims it supports:

432 James Grijalva. 2017. Resistance, Resilience and Reconciliation: Indigenous Human Rights to Environmental Protection in a Fossil Fuel Frenzy. *The Jurist* (April 11). Available at: <https://www.jurist.org/commentary/2017/04/resistance-resilience-and-reconciliation-indigenous-human-rights-to-environmental-protection-in-a-frenzy/> Accessed on: March 25, 2021.

433 *Standing Rock*. Document No. 601 (May 3, 2021).

434 *Id.*

1. Improved transparency on answers to questions on the report's findings and conclusions.
2. Gross underestimation of the worst-case discharge (WCD) of toxic and highly flammable Bakken crude.
3. Failure to evaluate the real risk of a catastrophe given ET's worst-in-class spill record.
4. Failure by the Army Corps and ET/Dakota Access to "construct and maintain the pipeline to meet or exceed industry and governmental requirements and standards" despite a claim to do so. Especially concerning is the absence of the more rigorous pipeline and oil spill prevention standards developed in response to government reports and legislation that have emerged out of recent pipeline disasters.
5. No application of human factors standards or analysis addressing the prevention of human error and delayed decision-making during spill-related emergency shutdown events despite a 2016 large ETP/Sunoco crude spill that involved a 12-day decision to initiate an emergency shutdown.
6. No analysis of the impact from "adverse weather conditions" on the Lake Oahe emergency shutoff valve performance including the shocking lack of back-up power to remotely close the valves at their unmanned isolated location.
7. Ineffective consideration of over-pressurization of the pipeline.
8. The failure to effectively address the lessons of recent wintertime incidents, including the serious issue of Bakken oil spills under ice, such as the 2016 Bridger Pipeline spill, that can greatly impair the cleanup.

If the process thus far has demonstrated anything, it's that the Army Corps continues to rely on assessment processes, modes of communication, information from the pipeline owner, and external consultants that—taken together—are known to lack sensitivity and accountability to Indigenous peoples' concerns, rights, and capacities to participate on genuinely equal footing with powerful private and government parties. The fact that Dakota Access has referred to the Tribe's experts as "litigation-driven consultants...[that] lack documented expertise in oil-spill modeling"⁴³⁵ while simultaneously referring to Lake Oahe, the 9th largest freshwater lake in the U.S., as "a small, man-made reservoir on the Missouri River, which is already crossed by many pipelines and utilities"⁴³⁶ speaks **volumes about Dakota Access' not so thinly veiled attempts to deflect from the significant construction, operational, and safety issues that plague ET/Dakota Access/Sunoco.**

The response by ET/Dakota Access/Sunoco to incident after incident, and violation after violation, has been inhumane. And there is no reason for the Tribes to expect the DAPL is ever going to be anything less than a constant threat to its people and the planet...every minute, every hour, every day, every week, every month, and every year.

The ET family of companies have been plagued by a never-ending list of poor operational and safety management and integrity issues. The ET/Sunoco/Dakota Access safety record is unequivocally abysmal and getting worse. We hate contemplating the situation that ET/

⁴³⁵ *Standing Rock Sioux Tribe v. Army Corps*, No. 20-5197 at 28t (D.C. Cir). *Dakota Access Redacted Opening Brief for Dakota Access, LLC*.

⁴³⁶ *Id* at 1.

Sunoco has created throughout Pennsylvania and Ohio as one that could be repeated in North Dakota on or near the precious and sacred waters of the Missouri River.

A catastrophic spill of Bakken crude from a pipeline with a throughput of 1.1 million bpd would have devastating consequences anywhere along the pipeline route, but a spill or leak at Lake Oahe is much more likely to have yet untold cumulative impacts along the Missouri River.

PHMSA has already uncovered significant violations for the DAPL.

What more awaits?

North Dakota is also a Cooperating Agency to the EIS. State leaders are vehement about maintaining the status quo and working to ensure that the Army Corps issues a record of decision that favors leaving the pipeline in the ground, as is.

We also hate contemplating whether North Dakota Attorney General Wayne Stenehjem would, in the event of a major spill, investigate and prosecute ET/DAPL/Sunoco with the same aggressiveness and vigor his office demonstrated in prosecuting Water Protectors at Standing Rock in 2016-2017. Nor are we at all confident AG Stenehjem would act as aggressively as his fellow attorney general in Pennsylvania, Josh Shapiro, has in filing multi-million-dollar fines and criminal charges against ET/Sunoco. PA citizens have paid the ultimate price for the catastrophic failures and wanton acts of contamination and pollution wrought by ET's Mariner 2 East pipeline's assault on PA citizens' lives, land, and water. **Unless we take the information in this report to fight back, the DAPL will be our Mariner 2.**

The argument that the Army Corps has already done all the work needed for the EIS ignores the fact that DAPL now proposes to double its capacity to 1.1 million bpd. The poorly prepared and analyzed PDEIS released to the Standing Rock, Cheyenne River, and Oglala Sioux Tribes – three Tribes that have vehemently opposed and only agreed to participate as cooperating agencies to gain information and a say in how the EIS was prepared – makes it even more readily apparent that the Army Corps is intent on approving a faulty and safety-issue ridden project. As supposed Cooperating Agencies, the Tribes have been relegated by the Army Corps as mere sources of information and have not been granted seats at the table to ensure that the EIS process is transparent, open, and comprehensive.

The DAPL is unsafe and its operator and owner, ET/Dakota Access/Sunoco, is a picture-perfect example of poor performance and high risk. Poor performance and high risk should be reason enough for the Army Corps to deny issuing easement permits to operate across Lake Oahe.

The DAPL's construction and subsequently increased operations at double its original capacity presents too many potentially significant negative environmental, cultural, social, and economic impacts to be considered safe and no amount of safety technology can make it so. From the Tribes' perspective, the Oceti Sakowin traditions, unique regional cultures, sovereignty, and long-term viability remain at critical risk due to the DAPL's continued existence. Thus, the only real solution is for the Army Corps to determine that the Lake Oahe route presents too many significant impacts and that the preferred alternative should be abandonment and the permits for the easements should continue to remain vacated.

07. APPENDIX A

Chronology of Events of the Dakota Access Pipeline Project

DATE	EVENT
2014	
June	Energy Transfer (ET) holds project kickoff meetings with State agencies, SHPOs, Fish & Wildlife Management Agencies, Army Corps, USFWS to discuss DAPL proposal.
June 25	ET publicly announces plans for DAPL under their subsidiary, Dakota Access, LLC.
September 30	ET/Dakota Access LLC conducts informal consultation with SRST at Fort Yates, ND regarding proposed pipeline project.
October	ET/Dakota Access requests NHPA Section 106 consultation with Army Corps & permission to conduct bore tests for HDD at Lake Oahe. Phillips acquires 25% ownership stake in DAPL. ET/Dakota Access LLC begins informational meetings with potentially affected landowners in South Dakota & Illinois.
October 21	ET/Dakota Access LLC initiates consultation with Army Corps regarding a "permanent easement" for Army Corps-managed lands at Lake Oahe.
October 29	ET/Dakota Access LLC submits project application to Iowa Utilities Board (IUB) for Hazardous Liquid Pipeline Permit.
December	ET/Dakota Access LLC begins informational meeting with potentially affected landowners in Iowa.
December 14	ET/Dakota Access LLC submits Application for Facility Permit to South Dakota Public Utilities Commission to construct the DAPL pipeline.
December 22	ET/Dakota Access LLC submits Applications for Certificate of Public Convenience & Necessity/Good Standing/Service Authority to Illinois Commerce Commission (ICC). ET/Dakota Access LLC submits Application for Corridor Compatibility and Route Permit to ND Public Service Commission.
December 29	ET/Dakota Access LLC applies to Army Corps for approval of five pre-construction notifications (PCNs) for HDDs, including for Lake Sakakawea & Lake Oahe.

DATE	EVENT
2015	
January 21 & 22	SDPUC holds public hearings on DAPL in Bowdle, Redfield, Iroquois, & Sioux Falls, SD
February	ET/Dakota Access LLC holds webinar for affected counties in Illinois. ET/Dakota Access LLC files with Iowa Dept of Natural Resources for land & floodplain permits.
February 15	Army Corps rejects ET/Dakota Access LLC applications for five PCNs & requires EA.
March 25	ET/Dakota Access LLC submits application for NWP-12 Authorization
March 30	Army Corps formally informs ET/Dakota Access LLC of need for preparation of a NEPA Environmental Assessment (EA).
April 29	Col. Henderson meets with SRST.
May 14	Col. Henderson meets with SRST.
May 28	NDPSC public hearing in Mandan, ND.
June 15 and 26	NDPSC holds hearings in Killdeer & Williston, ND.
June 29	ET/Dakota Access LLC submits application to Army Corps requesting permanent easement across "federally owned property at Lake Oahe" (Dakota Access Application for Transportation and Utility Systems and Facilities on Federal Lands).
August	Yankton Sioux Tribe submits testimony to SDPUC to rebut ET/Dakota Access LLC statements regarding consultation with YST.
September 3	Army transmits letters to the Chairman and Ranking Members of the Senate Committee on Energy and Natural Resources and House of Representatives Committee on Natural Resources notifying Congress that Dakota Access had applied for an easement pursuant to 30 U.S.C. § 185(w). See Letter from P. Cramer, Deputy Asst. Sec'y of the Army, to Hon. R. Bishop, U.S. House of Representatives.
November 30	SDPUC approves DAPL construction permit.
December	ET/Dakota Access LLC submits Application for Hazardous Liquid Materials Pipeline Permit to the Iowa Utilities Board (UAB).

DATE	EVENT
December 8	<p>Army Corps publishes Draft EA, "Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands" with 30-day comment period.</p> <p>Army Corps holds meeting with Tribes to discuss EA. Tribes request spill response plans which Corps agrees to provide by Dec. 18.</p>
December 14	SDPUC issues final order & conditions of approval for Energy Facility permit for DAPL construction.
December 16	ICC issues order approving ET/Dakota Access LLC Certificate of Public Convenience & Necessity/Good Standing/Service Authority.
2016	
January	ET/Dakota Access LLC files 23 condemnation suits in ND against individuals, banks, and a mine.
January 5	ENVY Group (Turkey), a global pipeline engineering firm, with the assistance of CRST technical team members, publishes Technical Engineering and Safety Assessment: Routing, Construction, and Operation of the Dakota Access Pipeline in North Dakota, detailing technical engineering issues with ET/Dakota Access LLC's proposed 7,800 ft long HDD under Lake Oahe.
January 8	<p>SRST submits comments on Draft EA to Army Corps.</p> <p>EPA sends first of two letters (supplemental on March 11, 2016) emphasizing that the risk of potential project impacts analyzed in the EA would be "significant," that an preparation of an EIS was appropriate.</p>
January 20	NDPSC issues approval to ET/Dakota Access LLC for a Certificate of Corridor Compatibility and a Route Permit.
January 25	Army Corps meets with SRST at Ponca Tribal Headquarters, OK.
February 18-19	Army Corps Omaha District Commander, Colonel Henderson, meets with Tribes at Ponca Tribal Headquarters, OK.
February 26	Colonel Henderson meets with SRST.
March	IUB issues approval of ET/Dakota Access LLC Hazardous Liquids Pipeline Permit & last state to approve DAPL.
March 3	Army Corps holds meeting with Tribes in Omaha District Office.

DATE	EVENT
March 8	Army Corps conducts onsite meeting at Lake Oahe with SRST Archaeologist, Dr. Kelly Morgan, & SRST THPO Jon Eagle, Sr.
March 11	EPA sends Army Corps a supplemental comment letter (first letter January 8, 2016) emphasizing that because potential project impacts would be "significant," affecting water quality and SRST tribal rights, an EIS was necessary.
March 22	Army Corps conducts additional onsite meeting at Lake Oahe with SRST Archaeologist, Dr. Kelly Morgan, & SRST THPO Jon Eagle, Sr.
March 24	SRST submits additional comments on Draft EA to Army Corps; CRST & YST submit comments.
March 29	<p>DOI sends comment letter to Army Corps on the draft EA stating that an EIS was necessary based on concerns about impacts to SRST and that consideration of impacts did not adequately justify or otherwise support its conclusion that there would be no significant impacts upon the surrounding environment and community.</p> <p>DOI also states that Army Corps' conclusion was not supported by analysis or data and, where potential adverse impacts were acknowledged, and no level of intensity was assigned as required under NEPA.</p> <p>DOI also stated they concurred with EPA's letters of January 8 and March 11, 2016.</p>
April 1	NoDAPL water protectors establish Sacred Stone Camp near Cannonball, ND & adjacent to Army Corps' easement on west side of Lake Oahe crossing.
April 22	Army Corps issues Determination of (No) Effect for DAPL for cultural resources under NHPA Section 106.
April 26	SRST objects to Army Corps Section 106 determination; Advisory Council on Historic Preservation (ACHP) also objects.
April 29	Army Corps' Omaha District Commander, Colonel Henderson, meets with SRST.
May 14	Colonel Henderson meets with SRST.

DATE	EVENT
June	ET/Dakota Access LLC begins pipeline construction on private and state lands (97 percent of DAPL) in North Dakota, South Dakota, Iowa, and Illinois.
July 25	Army Corps publishes Final EA & Finding of No Significant Impact (FONSI), "Dakota Access Pipeline Project Crossings of Flowage Easements and Federal Lands" with 30-day comment period; Army Corps issues 204 Pre-Construction Notices (PCN) under NWP-12 for DAPL project.
July 27	SRST files suit in D.C. District Court against Army Corps for issuing DAPL PCNs for entire length of DAPL due to violations of NHPA Section 106.
August 4	SRST files suit in D.C. District Court for Preliminary Injunctive Relief regarding PCNs along length of DAPL.
August 16	CRST files motion to intervene in SRST's DAPL case. Enbridge (75%) and Marathon Petroleum (25%) agree to purchase a 49% stake in DAPL for \$2 billion.
August 19	D.C. District Court Judge Boasberg grants CRST motion to intervene.
August 24	Judge Boasberg holds a hearing on SRST's August 4 motion in Washington, D.C. Over 500 people participated in an action outside the federal courthouse in support of the Tribe. The Judge indicated that he would rule in roughly two weeks.
September	DOJ receives more than 33,000 petitions to review all permits & order a full review of the DAPL project's environmental effects.
September 3	While the parties are awaiting the Court's decision, Dakota Access bulldozes an area of the pipeline corridor filled with Tribal sacred sites and burials that had been identified to the Court the previous day. SRST & CRST file request for a Temporary Restraining Order (TRO) to stop DAPL construction until D.C. District Court resolves August 4 suit for Preliminary Injunctive Relief.
September 6	D.C. District Court Judge Boasberg holds an emergency hearing & issues TRO for DAPL for areas in vicinity of Lake Oahe crossing, but declines to halt construction on others portions of the pipeline route, including that which had recently been identified by former SRST THPO Tim Mentz as sacred tribal burial ground.

DATE	EVENT
September 8	ND Gov. Dalrymple declares a state of emergency and calls on ND National Guard to assist with Dakota Access Pipeline protest security.
September 9	D.C. District Court Judge Boasberg issues Memorandum Opinion denying SRST request for Preliminary Injunctive Relief. "Rare" joint statement from DOJ, Department of Army, & DOI intervenes in SRST v. Army Corps case & Army Corps announces decision not to authorize DAPL construction across Lake Oahe until "issues" around NEPA, NHPA, NWP permits and other federal laws can be resolved. SRST & CRST file appeal to D.C. Circuit Court of Appeals on denial of request for Preliminary Injunctive Relief.
September 12	SRST & CRST files request for Preliminary Injunction based upon outcome of appeal before D.C. Circuit Court of Appeals.
September 16	D.C. Court Judge Boasberg issues an order for "administrative injunction ... to give the court sufficient opportunity to consider the emergency motion for injunction pending appeal." Court enjoins ET/Dakota Access LLC from continuing construction "for 20 miles on both sides of the Missouri River at Lake Oahe."
September 20	SRST Chairman Archambault addresses UN Human Rights Council in Geneva, Switzerland & speaks about sovereignty.
October 20	Army Corps conducts a site visit to the area bulldozed September 2 to determine whether ET/Dakota Access LLC violated federal law by knowingly damaging a tribal sacred site. Under federal law, if ET/Dakota Access LLC had been found to have knowingly damaged a historic or cultural resource with the intent of sidestepping NHPA, Corps cannot issue easement.
November 1	President Obama announces he was directing Army Corps to examine DAPL issues & possible rerouting.
November 3	Richard Kuprewicz of Accufacts, Inc., an industry & government pipeline consultant, submits his report to SRST detailing why the Army Corps' DAPL EA was inadequate in assessing pipeline engineering flaws and potential environmental impacts of projects on Tribes.
November 14	Army Corps issues statement that further examinations of DAPL issues would occur and would delay issuing Lake Oahe easement

DATE	EVENT
November 15	<p>National Day of Action occurs in cities globally to support Tribes & NoDAPL water protectors.</p> <p>ET/Dakota Access LLC files cross-claim against Army Corps for temporary delay of easement & requests expedited judgement.</p>
November 16	<p>SRST & CRST Technical Team of pipeline engineers, Tribes' legal representatives, & policy experts established & meet in Fort Yates, ND.</p>
November 20	<p>Morton County, ND law enforcement and supporting law enforcement from other jurisdictions clash violently with water protectors during evening.</p>
November 25	<p>Army Corps announces access area to north of the Cannonball River, including Standing Rock water protector campsite at Oceti Sakowin, to be prohibited by December 5 public safety & health reasons.</p>
November 28	<p>ND Governor Dalrymple issues executive order calling for mandatory evacuation of all campers located on U.S. Army Corps of Engineers lands (Oceti Sakowin camp).</p> <p>Water Protector Legal Collective, an initiative of the National Lawyers Guild, files a lawsuit in US District Court in ND against Morton County, Morton County Sheriff Kyle Kirschmeier, & other law enforcement agencies for using excessive force against peaceful protesters near Standing Rock water protector camps on night of November 20.</p>
December 2	<p>SRST, CRST, & YST ask the Inter-American Commission on Human Rights to condemn & help stop violence against water protectors.</p> <p>An official petition submitted to the IACHR.</p>
December 4	<p>Assistant Secretary of the Army for Civil Works, Jo-Ellen Darcy, announces Army Corps would not issue authorization to DAPL to cross Lake Oahe & an NEPA EIS would be prepared due to "significant impacts" of the project on Tribes.</p>
December 9	<p>D.C. District Court Judge Boasberg denies, in part, ET/Dakota Access LLC's request for summary judgement on Army Corps' proposed actions per their December 4 memorandum.</p> <p>Tribal representatives testify at a IACHR hearing.</p>
December 16	<p>Salon reports that a private, paramilitary security firm, Tiger Swan, had been hired by ET/Dakota Access LLC to infiltrate water protector camps & gather intel for law enforcement to use in prosecution of water protectors.</p>

DATE	EVENT
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2017

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|----------------------------|--|
| January 18 | Army Corps publishes in Federal Register a Notice of Intent (NOI) announcing Scoping Period as part of preparation an EIS for DAPL. |
| January 24 | President Donald Trump issues a Presidential Memorandum authorizing DAPL & Keystone XL pipelines. |
| February 7 | <p>Army Corps publishes in Federal Register a Notice of Withdrawal of their intent to prepare an EIS for DAPL.</p> <p>Army Corps notifies Congress of intent to issue ET/Dakota Access LLC easements for Lake Oahe.</p> |
| February 8 | <p>Army Corps grants & issues ET/Dakota Access LLC easement to cross Lake Oahe.</p> <p>ET/Dakota Access LLC commences hydraulic directional drilling (HDD) from west bank to east bank of Lake Oahe.</p> |
| February 9 & 10 | <p>CRST files suit against Army Corps in D.C. District seeking a TRO on construction pending resolution of the DAPL legal issues and a preparation of an EIS.</p> <p>SRST joins CRST in suit on February 10.</p> |
| February 13 | <p>D.C. District Court Judge Boasberg issues Minute Order denying CRST & SRST TRO Application for the DAPL.</p> <p>CRST makes motion to D.C. Court that as ET/Dakota Access LLC prepares to place oil in pipeline that the pipeline is in violation of the Religious Freedom Restoration Act (RFRA).</p> |
| February 14 | <p>Tribes seek partial summary judgment on the key issues in the case; specifically, whether the Army Corps' issuance of the easement at Lake Oahe, as well as prior authorizations, violated its duties under Tribal Treaties, NEPA, and CWA.</p> <p>Tribes submit Exhibit of DOI Office of the Solicitor 38-page December 4, 2016 memorandum legal opinion on treaty & environmental statutory concerns of DAPL that had not previously been publicly entered in court docket.</p> |
| February 15 | ND Gov. Burgum issues an emergency evacuation order of the Oceti Sakowin camp, ordering that the site be vacated by 2:00pm local time on Feb. 22. |

DATE	EVENT
February 22	Army Corps removes last remaining NoDAPL water protectors & closes camps near Lake Oahe.
March 6	ET/Dakota Access LLC files status report to D.C. District Court indicating they expect oil to begin filling pipeline week of March 13 as HDD construction continues.
March 7	D.C. District Court Judge Boasberg issues Order & Memorandum Opinion denying CRST (joined by SRST & YST) request for emergency injunctive relief/TRO for DAPL construction based on violations of RFRA citing “laches” (not timely filing; agreeing with Army Corps’ argument on laches) & that CRST’s claim that the DAPL impacts religious practice lacked merit because pipeline did not prevent tribal members from their religious expression.
March 15	CRST & SRST make emergency motion for preliminary injunction to D.C. District Court on DAPL pending appeal to D.C. Circuit Court of Appeals on violations of RFRA.
March 18	D.C. Circuit Court of Appeals denies CRST’s appeal of D.C. District Judge Boasberg’s denial for injunctive relief based on RFRA
March 27	ET/Dakota Access LLC informs D.C. District Court that oil has been placed in the pipeline.
April 17	ET/Dakota Access LLC completes HDD crossing of Lake Oahe.
April 28	SRST motions for dismissal of its appeal to the D.C. Circuit Court of Appeals for DAPL violations of RFRA.
May 14	DAPL filled with Bakken crude & completes hydrostatic testing.
May 17	Pursuant to Rule 7.1 of the Federal Rules of Civil Procedure, ET/Dakota Access LLC states to the D.C. District Court that it is owned 75% by Dakota Access Holdings, LLC, 25% by Phillips 66 DAPL Holdings LLC, & other companies.
May 27	The Intercept publishes a report regarding leaked documents they obtained revealing counterterrorism techniques used at Standing Rock to “defeat pipeline insurgencies.”
June 1	DAPL begins delivering commercial quantities of Bakken crude to Patoka refinery terminal in Illinois.

DATE	EVENT
June 14	<p>D.C. Court Judge Boasberg issues 91-page Memorandum Opinion stating Army Corps' permits authorizing Lake Oahe crossing were, in part, a violation of NEPA because 1) A "Presidential Memorandum" hastily issued by Trump administration just days after the inauguration violated NEPA when Army Corps did not adequately consider the controversy & disagreement among experts regarding spill risks; 2) did not examine effect of a spill on Tribal hunting & fishing rights; & 3) did not adequately assess environmental justice impacts.</p> <p>Judge Boasberg remands Army Corps to address NEPA deficiency issues requires the Corps to conduct additional environmental analysis on three issues identified.</p> <p>Court did not determine whether pipeline operations should be shut down.</p>
July 7	<p>Army Corps files brief regarding remand status & opposing any order by D.C. District Court Judge Boasberg to vacate (vacatur) DAPL permit for Lake Oahe easement while Army Corps remedies EA issues, stating Boasberg's decision that Corp had mostly achieved NEPA compliance for DAPL EA.</p>
July 17	<p>American Petroleum Institute (API) & other DAPL supporters file brief (amici curae) opposing vacatur of Lake Oahe easement while Corps remedies EA per June 14 Memorandum Opinion.</p> <p>ERM (Environmental Resource Management), firm that Army Corps selects to prepare EIS ordered by Judge Boasberg in March 2020, is a member of API & with API's amicus brief is indicating support for DAPL, a conflict of interest.</p>
September 24	<p>Army Corps begins process of requesting information from Tribes for remand ordered by D.C. District Court Judge Boasberg on June 14, 2017.</p>
October 11	<p>D.C. District Court Judge issues Order & Memorandum Opinion stating that vacating Lake Oahe easement ("WITHOUT vacatur") was not warranted as, "...that the Army Corps' three errors were not fundamental or incurable flaws in the original analysis; rather, the agency has a significant possibility of justifying its prior determinations on remand."</p> <p>Boasberg acknowledges vacating easement based on Tribes' arguments have merit ("equities of disruption do not tip sharply in Defendants' favor..."), but Army Corps' significant compliance with NEPA "is enough here for them to avoid vacatur."</p>

DATE	EVENT
November 13	YST files motion with D.C. District Court requesting partial summary judgement to vacate DAPL easements citing Army Corps' NEPA, Trust, & treaty violations, threats to cultural identity, & impacts to the quality & quantity of Missouri River water which has spiritual & religious significance.
December 4	D.C. District Court Judge Boasberg issues Memorandum Opinion & Order on YST motion for DAPL monitoring measures during Army Corps' remand requiring: (1) ET/Dakota Access LLC, Army Corps & Tribes coordinate to finalize spill response plans at Lake Oahe & file with Court by April 1, 2018; (2) completion of an independent third-party compliance audit by April 1, 2018 & selection of that auditor to be in consultation with Tribes; & (3) ET/Dakota Access LLC ordered to file bi-monthly pipeline status reports with Court during remand.
2018	
March 2	SRST files motion to D.C. District Court for clarification & request for additional conditions on remand (December 4, 2017) based on ET/Dakota Access LLC's bias toward selection of three third-party consultants with business ties to ETP. SRST also requests court to compel ET/Dakota Access LLC & Corps to provide SRST technical team with unredacted spill response plan & other requested technical information.
March 5	SRST, SRST technical team, Army Corps & DOJ meet at Fort Yates, ND on remand issues in a contentious meeting. SRST presents to Army Corps & DOJ SRST technical team report, Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux Tribe.
March 15	SRST, SRST technical team, Army Corps & DOJ meet again at Fort Yates, ND on remand issues in another contentious meeting.
March 19	D.C. District Court Judge Boasberg issues Order & Memorandum Opinion on YST's November 13, 2017 motion for partial summary judgement against Army Corps for Treaty, NEPA& NHPA violations due to YST's inability to prove harm from DAPL because of YST Reservation distance from Lake Oahe crossing.

DATE	EVENT
April 2	<p>ET/Dakota Access LLC attorneys submit Status Report to notify D.C. District Court that per December 4, 2017 Memorandum Opinion and Order, that ET/Dakota Access LLC, “with input from the Tribes, [to] select a third-party expert engineering company to review easement conditions and regulations, and to assess compliance with all such conditions as well as other integrity threats.”</p> <p>“As explained in Dakota Access’s Opposition to Plaintiffs’ motions regarding remand, Dakota Access sought input from the Tribes; solicited bids from four firms, including the firm that the Tribes recommended; and selected Process Performance Consultants, LLC (“P-PIC”) to conduct this independent assessment. P-PIC has completed its assessment, and the resulting report is attached.”</p> <p>SRST technical team objects to report stating P-PIC IS NOT an engineering firm with professional engineering qualifications to assess pipeline integrity, rather P-PIC is an insurance liability firm.</p> <p>ET/Dakota Access LLC’s two other recommendations are large engineering consulting firms with deep & long-term ties to permitting oil & gas projects.</p> <p>ET/Dakota Access LLC rejected SRST technical team’s selection (based on “cost”) Gordon Aaker, PE of Engineering Services, LP a recognized expert with 40 years of experience leading oil & gas Root Cause Failure Analysis, integrity consulting, & litigation support for industry & governments on onshore and offshore projects, including catastrophic failures of BP Deep Water Horizon and Chevron Richmond Refinery.</p> <p>Army Corps & DOJ submit Status Report stating they have not received requested information from CRST, YST, & OST for analysis on remand.</p> <p>Army Corps & DOJ state receiving SRST technical team report, Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux Tribe, requiring additional time to review before completing remand.</p> <p>Army Corps & DOJ state SRST technical team (& other Tribes) request additional information, delaying Army Corps’ ability to respond to D.C. Court on remand by court-ordered date of April 2, 2018.</p>
April 16	<p>D.C. District Court Judge Boasberg denies Tribes’ motion (March 2, 2018) for more detailed consultation & information regarding the response plan & other relevant spill response information necessary to evaluate ET/Dakota Access LLC proposals.</p> <p>Boasberg also denies motion by Tribes that third-party auditor (P-PIC) is not a qualified expert nor sufficiently independent based on the P-PIC “audit” having been already submitted (April 2, 2018) making Tribes’ motion “moot.”</p>

DATE	EVENT
August 31	<p>Army Corps (Omaha District Commander, Colonel John Hudson, PE) submits to D.C. District Court a two-page "memorandum of record" summarizing remand (Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe) & affirming the Army Corps' DAPL Final EA & FONSI without submitting supporting technical analysis.</p> <p>Memorandum states that Corps doesn't need to revisit its 2016 approval of the now-operating project & states their intention to issue Lake Oahe easement as provided under MLA.</p>
September 24	<p>PHMSA submits review of Army Corps' technical Analysis of Issues (remand report) to Army Corps.</p>
October 1	<p>Tribes submits Status Report on remand analysis to D.C. District Court acknowledging receipt of redacted report & requesting unredacted report agreeing to protective order until public release or report.</p>
November 1	<p>SRST & Tribes file motion for supplemental complaint objecting to Army Corps' conclusion on remand that DAPL would have "no significant impacts" as per conclusion in DAPL Final EA & Mitigated FONSI.</p> <p>Motion reiterates Army Corps' decision-making & conclusions were devoid of SRST technical team's "extensive technical input provided by the Tribe & others undermining its conclusion."</p>
November 26	<p>OST files motion to D.C. District Court requesting to submit supplemental complaint & request for injunctive relief to compel Army Corps to complete an EIS & rejecting Army Corps' NOI (February 7, 2017) to withdraw preparation of an EIS.</p>
2019	
January 10	<p>D.C. District Court Judge Boasberg issues Order and Memorandum Opinion denying OST motion (November 26, 2018) to amend original SRST complaint.</p>

DATE	EVENT
February 5	<p>SRST & SRST technical team publish the 60-page, Report Addressing Deficiencies in the Corps of Engineers' Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe.</p> <p>Report documents Army Corps' & DAPL's deficiencies & omissions in the Army Corps' 100-page remand technical analysis, including lack of objectivity & transparency; failure to consider toxic risks of Bakken crude in the event of a spill; still unresolved issues SRST raised about risk assessment caused by leaks, inability to detect long, slow leaks, use of appropriate modeling, groundwater contamination, & landslide risks; inappropriate analysis of worst case discharge (WCD); & flawed environmental justice analysis.</p> <p>Report submitted to D.C. District Court.</p>
February 21	<p>ET, parent company of Dakota Access, LLC, files lawsuit against Greenpeace in North Dakota state court, alleging Greenpeace & activists conspired to use illegal & violent means to disrupt construction & damage the company. Lawsuit seeks millions of dollars in damages.</p> <p>Claims in this filing like claims in ETP's previous suit against Greenpeace in federal court, which was dismissed by US District Court for the District of North Dakota on Feb. 14, 2019.</p>
February 27	<p>SRST Motion to have D.C. District Court order Army Corps to update AR to include documents used in remand analysis & third-party audit.</p>
February 28	<p>SRST Chairman, Mike Faith, responds to Army Corps Omaha District Commander, Colonel Hudson's memorandum of August 31, 2018 on the Army Corps' Remand Technical Analysis.</p> <p>Faith states Corps failed to comply with D.C. District Court Judge Boasberg's February June 14, 2017 order to consider the effect that the pipeline might have on local tribes.</p> <p>Chairman Faith refers Army Corps document, which states that their analysis "identified no new information" on the pipeline's impact on the tribes. This memo, dated February 4, 2018, was produced three months before Army Corps ever met with the Tribes.</p> <p>Chairman Faith argues Army Corps came to a premature conclusion, calling it "...a rigged process intended to justify a dangerous and illegal pipeline."</p>
March 11	<p>Army Corps & ET/Dakota Access LLC submit separate Memoranda in opposition to SRST Motion to have Court compel Army Corp and ET/ Dakota Access LLC to update AR.</p>

DATE	EVENT
March 14	ET/Dakota Access LLC files motion opposing SRST request to complete AR.
March 18	SRST replies to Army Corp & ET/Dakota Access LLC opposition to updating AR.
March 22	SRST submits joint appendix of remand analysis record requesting 17 documents.
May 8	D.C. District Court Judge Boasberg issues Order & Memorandum Opinion partially granting & partially denying SRST's motion to compel Army Corps to complete AR.
June 5	D.C. District Court Judge Boasberg issues Minute Order compelling Army Corps to provide unredacted as-built drawings to the Tribes, under protective order (limited disclosure to certain parties & experts). Army Corps responds to Court objecting to order to submit certain relevant references, citations, & documents to AR, including Spill Model Report documents which the court previously ruled were not part of the AR.
June 11	OST files response on SRST motion to compel Army Corps to submit relevant references, citations, & documents cited by Army Corps in in Spill Model Report. D.C. District Court Judge Boasberg issues Minute Order stating that documents cited in Table 2-2 of Remand Analysis are not required to be entered into AR
June 19	ET/Dakota Access LLC publicly announces plans to expand DAPL's capacity from more than 570,000 mbd to 1.1 million mbd.
June 20	ET/Dakota Access LLC formally submits application to NDPSC to expand DAPL capacity with additional compressor station.
July 29	SRST formally requests hearing in front of NDPSC on ET's proposed plan to double the DAPL capacity. The three-member NDPSC previously agreed to consider holding a hearing on the proposal if one were formally requested. In his request, Tribal Chairman Mike Faith says proposed capacity increase would increase "consequences as well as the likelihood" of an oil spill. Hearing is scheduled for Nov. 13, 2019.

DATE	EVENT
August 16	SRST files motion for summary judgement on Army Corps Remand Analysis and requests court order an EIS be conducted. YST files motion for summary judgement against Army Corps for violations of NEPA, NHPA, & Administrative Procedure Act (APA) stating Army Corps actions were "arbitrary and capricious, abuses of discretion & contrary to law."
August 21	NDPSC announces public hearings to be held on proposed DAPL expansion.
August 26	National Congress of American Indians (NCAI), Great Plains Tribal Chairman's Association (GPTCA), other Indigenous organizations, and 14 Tribes file amici curae supporting Tribes recent court requests for summary judgement.
October 9	Army Corps motions for summary judgment against the Tribes, claiming that "...Corps undertook a comprehensive analysis of the three limited items remanded for additional consideration" and asking the court to reaffirm its dismissal of SRST's claims in Standing Rock Sioux Tribe v. Army Corps, No. 1:16-cv-01534 (D.D.C. July 27, 2016).
November 13	SRST & SRST technical team members testify to NDPSC in Linton, ND against DAPL expansion proposal due to greater increased spill risk.
December 16	State of North Dakota announces it will work with SRST to develop a pipeline spill response plan as NDPSC considers proposal to double DAPL's capacity to 1.1 mbd.
2020	
January 31	Oral arguments are scheduled on motions by Army Corps & ET/Dakota Access LLC for summary judgment in D.C. District Court on March 18, 2020 at 11:00 am ET.
February 19	NDPSC approves expansion of DAPL

DATE	EVENT
March 25	<p>D.C. District Court Judge Boasberg issues Order & Memorandum Opinion stating SRST motion to strike ET/Dakota Access LLC.</p> <p>Court states Army Corps violated NEPA when it affirmed federal permits pipeline easement originally issued in 2016. Relying on SRST technical team's reports, Impacts of an Oil Spill from the Dakota Access Pipeline on the Standing Rock Sioux (February 2018) & Report Addressing Deficiencies in the Corps of Engineers' Analysis of the Issues Remanded by the U.S. District Court for the District of Columbia Related to the Dakota Access Pipeline Crossing at Lake Oahe, Court found significant unresolved concerns about the potential impacts of oil spills & likelihood that one could take place.</p> <p>Boasberg states Army Corps' NEPA remand analysis of issues did not satisfactorily & fully address how the pipeline affects SRST and others near its route.</p> <p>Boasberg writes "too many questions remain unanswered" about ET/Dakota Access LLC's impacts & orders Army Corps to conduct a full EIS. Up to this point, only EA and a supplement (Remand Technical Analysis), mandated by the court, have been completed.</p> <p>ET/Dakota Access LLC has been in operation nearly three years & is allowed to continue operating while the EIS is prepared.</p>
April 29	<p>Army Corps & ET/Dakota Access LLC file briefs with D.C. District Court asking it to allow the DAPL to continue to operate while a full EIS is prepared, as required by the Court's recent decision.</p> <p>Army Corps claims to be able to finish an EIS by mid-2021, already signaling that it will not take the process seriously.</p> <p>ET/Dakota Access LLC submits to Court that its pipeline is the safest pipeline in the world, relying still on secretive information that it has shielded from the AR & thus SRST, technical team, or any public scrutiny.</p> <p>DAPL supporters submit to court their six "amicus" (friend of the court) briefs representing oil companies, industry groups, & state of North Dakota.</p>
May 20	<p>SRST files motion asking D.C. District Court to shut down DAPL while EIS is prepared.</p> <p>Brief explains how shutting down ET/Dakota Access LLC would have limited impacts in light of the collapse in North Dakota oil production, & leaving it in place continues a pattern of government-sponsored trauma dating back two centuries.</p>

DATE	EVENT
July 6	<p>D.C. District Court Judge Boasberg issues Order & Memorandum Opinion vacates Army Corps' decision to grant an easement to ET/Dakota Access LLC for Lake Oahe crossing & orders DAPL be shut down within 30 days while Army Corps conducts the EIS.</p> <p>Boasberg states his order will remain in place pending completion of EIS, & issuance of new permits, if any, occurs. Boasberg also orders that DAPL will be drained of oil & shut down until the Army Corps completes a full Environmental Impact Statement. "[G]iven the seriousness of the Army Corps' NEPA error, the impossibility of a simple fix, the fact that Dakota Access did assume much of its economic risk knowingly, & the potential harm each day the pipeline operates, the court is forced to conclude that the flow of oil must cease."</p> <p>Boasberg leaves door open for any new Presidential Administration to make final permitting decisions pending outcome of November 2020 election.</p>
July 9	<p>Judge Boasberg declines to stay his July 6 order, meaning DAPL still needs to be shut down by August 5, 2020. The same day, Energy Transfer files an appeal in D.C. Circuit Court of Appeals.</p>
July 10	<p>ET/Dakota Access LLC files an emergency motion for a stay of July 6 order at the D.C. Circuit Court of Appeals, pending the appeal.</p>
July 13	<p>Army Corps files both an appeal of the July 6 order & an emergency motion for a stay in D.C. Circuit Court of Appeals.</p>
July 14	<p>D.C. Circuit Court of Appeals grants administrative stay of D.C. District Court Judge Boasberg's July 6 order, allowing DAPL to continue operating while the court considers whether to grant the emergency motions for stay.</p>
August 5	<p>D.C. Circuit Court of Appeals issues order dissolving administrative stay to shut down the pipeline, but further staying D.C. District Court Judge Boasberg's injunction to vacate the easement & require an EIS. D.C. Circuit Court of Appeals order sends case back to D.C. District Court for clarification on the shutdown.</p> <p>Dakota Access & Army Corps notifies D.C. District Court of their appeal of Boasberg's decision to shut the pipeline.</p> <p>D.C. District Court orders Army Corps to clarify whether they intend to allow the pipeline to operate despite vacating its easement.</p>
August 10	<p>Judge Boasberg orders Army Corps to provide a status update on its intentions regarding shutting down DAPL.</p>

DATE	EVENT
August 20	Dakota Access sent a letter to the Tribes stating that, although the company did not believe additional mitigation was necessary, "it nonetheless is willing to consider other mitigation measures that Plaintiffs believe would be appropriate."
August 26	The Army Corps and Dakota Access file their appeal briefs with the D.C. Circuit Court of Appeals challenging virtually everything the district court has ruled on from overturning the Army Corps' NEPA deficiencies, to ordering the EIS, to vacating the permits & shutting down DAPL.
August 31	Army Corps updates D.C. District Court about status of DAPL & announces their intent to re-initiate EIS, completing by April 2021.
September 8	SRST, CRST, YST, & OST file motion in D.C. District Court for injunction on continued DAPL operations pending completion of EIS process.
September 10	Army Corps files NOI in Federal Register to prepare an EIS regarding granting of an easement to DAPL to cross federal land at Lake Oahe. Scoping period initiated with publication of NOI initiating public comment period. Army Corps also announces scheduling for virtual public scoping meetings held via Facebook (due to Covid-19 pandemic) on October 15 & 16, 2020. Written comments must be received by October 26, 2020.
October 10	Army Corps files in Federal Register, announcing extension of public comment period for DAPL EIS to November 26, 2021.
October 15	ICC grants ET/Dakota Access LLC permission to double capacity of pipeline. Army Corps holds first public scoping meeting via Facebook (due to Covid). Army Corps states that recording would be made available publicly available. As July 1, 2021, the record has not appeared in the Army Corps' EIS AR or made available on the Army Corps' DAPL EIS Web site.
October 16	SRST, CRST, YST, & OST renew their motion for an injunction, seeking to shut down the pipeline following the D.C. Circuit's finding that the District Court failed to make the necessary findings to sustain injunctive relief. Army Corps holds second public scoping meeting via Facebook (due to Covid-19).
October 23	Army Corps extends public scoping period to November 26.

DATE EVENT

November 2 Army Corps provides status report to D.C. District Court stating that the EIS is scheduled for completion in March 2022.

November 4 D.C. Circuit Court of Appeals hears oral arguments of Army Corps & ET/Dakota Access LLC in their appeal of Judge Boasberg's July 6, 2020 Order and Memorandum Opinion.

November 24 Public comment period for the DAPL EIS closes.

2021

January 19 Tribal leaders from the SRST, CRST, OST, and YST send a joint letter to President Biden requesting decisive and swift action to shut down the DAPL, which continues to operate with a legal permit for easement while continuing to violate the Tribes' treaty rights and threaten the land and water resources on which the Tribes depend for their way of life and existence.

January 26 D.C. Circuit Court of Appeals reaffirms D.C. District Court's July 6, 2020 decision (Dakota Access & Army Corps appeals from August 26, 2020), finding Army Corps violated NEPA by issuing an easement for the pipeline to cross federal lands without preparing an EIS, & the lower court directing the Army Corps to prepare an EIS.

However, court of appeals reversed lower court's order that the pipeline shut down because it had not made the findings necessary to issue such an injunction. It leaves it to the Army Corps to determine how to "vindicate its property rights" as the pipeline no longer has an easement & is therefore encroaching on federal property. How the Army Corps addresses this issue leads to new litigation.

2021 D.C. District Court sets status hearing with Tribes, Army Corps, & ET/Dakota Access LLC for February 10, 2021

February 9 D.C. District Court reschedules status hearing to April 9, 2021

February 15 Army Corps extends invitations to the Standing Rock, Cheyenne River, Oglala, and Yankton Sioux Tribes to participate in the development of the EIS. Invitations are also extended to the Three Affiliated Tribes and the State of North Dakota, both of whom are supportive of the DAPL. Yankton Sioux Tribe declines invitation. Invitations from Army Corps comes just over five months since the EIS process was initiated on September 10, 2020.

DATE	EVENT
April 9	Legal representatives from Biden Administration's DOJ & Army Corps indicate at status hearing that Army Corps will not order shutdown of DAPL, despite controversy over ongoing threats pipeline poses Tribes & the fact that it is operating without a federal permit for the Lake Oahe easement.
April 23	D.C. Circuit Court of Appeals rejects ET/Dakota Access LLC's motion to rehear the company's appeal of a decision finding the oil pipeline's federal easement violated NEPA. Court of Appeals decision allows ET/Dakota Access LLC to now petition the US Supreme Court (SCOTUS) for review.
April 23	D.C. District Court Judge Boasberg orders Army Corps to file status report by May 3.
April 29	<p>Dakota Access petitions the US Supreme Court after D.C. Circuit Court of Appeals declines to rehear an order vacating the Section 408 (RHA) and Section 28 (MLA) easement permits.</p> <p>"Dakota Access respectfully requests that this court stay its mandate pending the filing and disposition of a petition for a writ of certiorari," the Energy Transfer LP-led pipeline told the U.S. Court of Appeals for the District of Columbia Circuit in an April 29 filing. "A stay would preserve the status quo, retaining jurisdiction in this court to consider a potential request for relief from vacatur while the Supreme Court considers the forthcoming petition."</p>
May 3	<p>State of North Dakota Motions to Intervene.</p> <p>Army Corps states EIS will be completed in March of 2022.</p> <p>"Corps expects to use that timeframe to fulfill its commitment to undertaking an open, transparent, and public EIS process which rigorously explores and objectively evaluates reasonable alternatives.</p>

DATE	EVENT
June 11	<p>Tribes submits required status report per D.C. District Court stating case is not over until Army Corps has complied with NEPA and issued a new final easement decision, arguing that it is unusual circumstance that DAPL continues to operate without an easement in violation of NEPA, as determined by the Court.</p> <p>Tribes also state that D.C. Court should retain jurisdiction to ensure compliance with EIS process & case should remain open because Army Corps "continues to consider enforcement actions, which would likely spawn further litigation...and to evaluate requests for interim relief."</p> <p>Army Corps submits required status report stating EIS will be completed in March 2022 & arguing D.C. District Court has no legal authority to require Army Corps provide monthly status reports, as requested by SRST, CRST, & YST.</p> <p>"Further, the Corps is committed to robust tribal consultations and to actively engaging with the cooperating agencies, which include several Plaintiff Tribes, to produce a thorough and comprehensive EIS."</p>
June 11	<p>Army Corps and Dakota Access file status reports stating that the Army Corps is preparing the EIS as ordered on remand, and that it was unnecessary for the court to retain jurisdiction over the case because there was nothing left to preside over.</p> <p>CRST stating that "Tribes submit that this case is not over until the Corps has complied with NEPA and issued a new final easement decision," and because case is under "unusual" facts of this case, the pipeline continues to operate without an easement in violation of NEPA.</p> <p>Tribes state court should retain jurisdiction over this case to ensure compliance with the EIS process, and to evaluate requests for interim relief.</p>
June 22	<p>D.C. District Court Judge Boasberg issues his Order for Dismissal dismissing Standing Rock Sioux Tribe v. Army Corps of Engineers</p> <p>Dismissal follows a series of status reports from SRST, Army Corps, & DAPL</p> <p>ET/Dakota Access LLC successfully argue EIS ordered by Boasberg is new agency action for an administrative record (AR) yet to be completed, & any legal actions against that decision would need to be sorted out in a new case.</p>
July 16	<p>The Army Corps makes the Preliminary Draft EIS (PDEIS) available to the Cooperating Agencies for review. Cooperating Agencies are given a September 22, 2022 deadline to provide edits, comments, and suggestions to Army Corps.</p>

DATE	EVENT
July 22	PHMSA sends ET/Dakota Access a letter and Army Corps notifies the D.C. District Court of a Notice of Proposed Violation, <u>Proposed Civil Penalty, and Proposed Compliance Order</u> detailing seven areas where an inspection conducted between April 29, 2019 and August 30, 2019 probable violations. Violations range from lack of impoundments around aboveground tanks (six facilities) to an outdated IMP and overpressuring issues, including a lack of necessary testing of appropriate safety relief valves devices. PHMSA also cites ET/Dakota Access for failure to meet public awareness standards (as established by API RP 1162) and a failure to implement the appropriate integrity management system for HCAs. PHMSA proposes fines totaling a mere \$93,200.
September 3	Army Corps extends their anticipated schedule for completion of the EIS by six months to September 2022 at request of Tribes. Approximately, 48,000 comments were received during public scoping and several of the Cooperating Agency Tribes requested additional time to evaluate comments.
September 20	ET/Dakota Access file a <u>petition certiorari</u> to the Supreme Court to appeal the D.C. Circuit Court of Appeals' January 26, 2021 decision reaffirming the lower D.C. District Court decision ordering the Army Corps to prepare an EIS for NEPA violations stemming from the Final EA and Mitigated FONSI (2016) and the court-ordered remand analysis (2018). ET/Dakota access state that the EIS creates uncertainty for the pipeline and puts it "at a significant risk of being shut down, which would precipitate serious economic and environmental consequences."
September 22	<p>On the day of the deadline for responding to the Army Corps regarding the PDEIS, Tribal Chairmen from SRST and CRST and Tribal President OST <u>send a joint letter to Jaime Pinkham (enrolled Coeur d'Alene Tribe), Acting Secretary of the Army for Civil Works</u>. Tribal leaders express their dissatisfaction with the EIS process, analysis, and the third-party contractor's conflicts-of-interest. Tribal leaders also demand current deficient EIS process be abandoned and a new process initiated in accordance with NEPA.</p> <p>SRST Tribal Chairman sends a <u>22-page letter to Colonel Mark Himes, Army Corps Omaha District Commander and District Engineer</u>, detailing the technical deficiencies in the PDEIS.</p>

DATE EVENT

October 8 OST Tribal Council holds a special session as part of government-to-government consultation with the Army Corps regarding the DAPL PDEIS. In five-hour meeting, tribal members and Tribal leaders detail their issues and concerns about the Army Corps' handling of the EIS. OST leadership indicates their intention to withdraw as a Cooperating Agency Tribe.

o8. APPENDIX B

Emergency Response and Spill Response Planning

All pipeline operators are required to have a plan for abnormal or emergency operations. Some pipeline operators are required by federal law to prepare two different kinds of emergency plans. Often these two different types of plans get confused in discussions leading to frustration from all those involved, so we have provided descriptions of both types here to try to avoid confusion and frustration. There are emergency plans required for both natural gas and hazardous liquid pipelines which basically include planning for how to train and respond to releases, who in the company has responsibilities, and how a company educates and involves emergency responders (such as fire departments) in their planning. These plans are covered under the regulations for gas at 49 CFR 192.615 and for liquid pipelines at 49 CFR 195.402 & 403.

The second type of plan only applies to hazardous liquid pipelines and is often referred to as a spill response plan or a facility response plan. These are much more detailed plans about how the company will respond to clean up fuels that escape the pipeline that may affect water. In these plans the company needs to spell out worst case scenarios and show precisely where equipment and personnel are available that can respond within certain timeframes to contain and clean up the spill. These are also the plans that companies use to train and drill with to prepare for actual releases. These plans are covered under the regulations at 49 CFR Part 194.

1. Emergency Planning

A. Natural Gas

The regulations governing natural gas transmission operators' obligations for emergency planning are found in 49 CFR 192.615. The regulations for gas emergency plans are not complicated and are quite short. Although each section has a few descriptive clarifiers, it boils down to this:

1. Each operator has to have a written plan on how it will respond to a list of various emergencies, including the personnel and equipment available, shutdown procedures, notification of fire, police and other public officials, service restoration, etc.;

2. The plan has to be furnished to supervisors, employees must be trained to it, and following an emergency, actions must be reviewed to determine if the plan was followed; and
3. Each operator "shall establish and maintain liaison with appropriate fire, police and other public officials" to coordinate responses and preparedness.

That last requirement, to maintain a liaison with local first responders, is one aspect of PG&E's emergency planning efforts that came under serious scrutiny following its 2010 pipeline explosion and fire in San Bruno, California, when the San Bruno fire chief was quoted as being completely unaware that there was a gas transmission line in that neighborhood. Following San Bruno, PHMSA issued an advisory bulletin to operators of both natural gas and liquid pipelines, [ADB-10-08](#), reminding them of their regulatory obligations to make their pipeline emergency response plans available to local emergency response officials. That advisory bulletin stated:



"To ensure a prompt, effective, and coordinated response to any type of emergency involving a pipeline facility, pipeline operators are required to maintain an informed relationship with emergency responders in their jurisdiction.

PHMSA reminds pipeline operators of these requirements, and in particular, the need to share the operator's emergency response plans with emergency responders. PHMSA recommends that operators provide such information to responders through the operator's liaison and public awareness activities, including during joint emergency response drills. PHMSA intends to evaluate the extent to which operators have provided local emergency responders with their emergency plans when PHMSA performs future inspections for compliance with relevant requirements."

The NTSB went even further in its report on the PG&E explosion. One of the many new safety recommendations it made to PHMSA following San Bruno was:

"Require operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines to provide system-specific information about their pipeline systems to the emergency response agencies of the communities

and jurisdictions in which those pipelines are located. This information should include pipe diameter, operating pressure, product transported, and potential impact radius.”

This recommendation, if implemented, would provide local emergency management and first responders with the information they need to appropriately plan responses and preventative and mitigating measures for dealing with the presence of a transmission line through their jurisdictions.

B. Hazardous Liquid Emergency Response Planning

The emergency planning for hazardous liquid pipelines is similar to that of natural gas. For hazardous liquid pipelines the emergency planning stems from the requirements in 49 CFR 195.402 for a manual for operations, maintenance, and emergencies. The general requirements for that manual state:

“Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.”

These manuals are not required to be approved by regulators, and copies of them are not turned in to regulators either, but they are reviewed during regulatory inspections. Anything included in the manuals can be the subject of an inspection. A couple of sections of the requirements for these manuals are of particular interest when it comes to how the pipeline company interacts with local government for emergencies. In the section regarding normal operations pipeline operators are required to include a system for:

“Establishing and maintaining liaison with fire, police, and other appropriate public officials to learn the responsibility and resources of each government organization that may respond to a hazardous liquid or carbon dioxide pipeline emergency and acquaint the officials with the operator’s ability in responding to a hazardous liquid or carbon dioxide pipeline emergency and means of communication.”

In the requirements for the emergency section of the manual it states during an emergency the pipeline operator must have procedures for:

“Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional

precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid."

Shortcomings of current emergency planning requirements

The regulations are clear that pipeline operators are supposed to be well prepared to respond to emergencies. It is also clear that they are supposed to have prepared local emergency response agencies with the information they need to respond as well. Unfortunately it is common after incidents to hear local emergency responders claim they had no knowledge of a pipeline within their jurisdiction. There are two main reasons heard over and over again for the lack of knowledge within the local fire and police departments.



1. Some pipeline operators have failed to adequately and repeatedly provide the necessary information and liaison with local emergency response agencies to ensure those agencies are ready if an incident occurs. This most likely can be cured by increased industry best practices and increased enforcement of these requirements by regulators.
2. Some local emergency response agencies are unwilling or unable to accept and incorporate information that pipeline operators have repeatedly attempted to provide them to ensure those agencies are ready if an incident occurs. This is more difficult to cure since there are no regulations that require these agencies to accept and incorporate this pipeline safety information. Many of these agencies are spread thin and have a multitude of demands on their attention from a variety of possible low frequency-high impact disaster scenarios. Adding to these challenges are a wide range of levels of equipment, numbers of volunteer responders and staff availability.

2. Spill Response Planning for Hazardous Liquid Pipelines

Following the Exxon Valdez oil spill in Alaska in 1989, Congress recognized that federal law lacked specificity with regard to private oil spill planning obligations. Accordingly, in the Oil Pollution Act of 1990 (OPA), which was an amendment to the Clean Water Act (CWA), Congress expanded requirements so that owners and operators of vessels and facilities prepare facility response plans (FRPs) where their operations might have an impact on waters protected by the Clean Water Act.

For pipelines, these plans are reviewed and approved by PHMSA. Other federal agencies review and approve these plans for vessels, onshore facilities like refineries, and for offshore production facilities.

In the past few years the regulations that apply to pipelines have been analyzed by a number of well qualified people and we borrow heavily from two of them here, and thank their primary authors for their efforts: Paul Blackburn, formerly of Plains Justice and currently an advisor to Bold Nebraska and the Minnesota affiliate of 350.org and a member of the Board of Directors of the Trust, and Sara Gosman, also a member of the Board of Directors of the Trust, principal author of a report from The National Wildlife Federation on the Enbridge Line 6b spill in Marshall, Michigan, and a member of the faculty at the University of Arkansas School of



Law. We have extracted excerpts from each of their reports, and abridged them significantly for length. If you are interested in this subject we recommend that you read both of these reports for the wealth of detail they provide.

The following section is from the Plains Justice report, *The Northern Great Plains at risk: Spill Planning Deficiencies in Keystone Pipeline System*, 11/23/2010. For those of you interested in reviewing the entire report, you can find it here: [http://plainsjustice.org/files/Keystone_XL/Keystone Pipeline Oil Spill Response Planning Report 2010-11-23 FINAL.pdf](http://plainsjustice.org/files/Keystone_XL/Keystone_Pipeline_Oil_Spill_Response_Planning_Report_2010-11-23_FINAL.pdf)

Overview of the Response Planning Process and Requirements

Federal law establishes a comprehensive system mandating that federal agencies and private companies plan for and respond to oil spills. Central to this system is a hierarchy of oil spill response plans that is intended to ensure that response planning capability is adequate to respond to worst-case oil spills. These range from the nationwide National Contingency Plan (NCP), to regional Area Contingency Plans (ACP), [which are generally prepared by the EPA (onshore) and Coast Guard (offshore)] to more focused Subarea Contingency Plans (SCP) that focus on particular cities and watersheds, and finally to FRPs that are prepared for specific facilities, such as oil refineries, offshore oil platforms, and oil pipelines. Since the owner or operator of a facility that spills oil bears primary responsibility under law for cleaning up oil spills, the plans that most impact the effectiveness of response to a particular oil spill are FRPs.

Federal law does not require mere paper planning. The law also requires that private companies have acquired and pre-positioned necessary equipment and personnel before they begin operations. Congress intended that federally mandated plans result in actual boots and equipment on the ground – not boilerplate and conceptual dreaming. FRPs are the mechanism whereby federal agencies can ensure that private companies have the tools they need at hand when something goes wrong. This being said, the NCP, ACPs, and SCPs are important because they are intended to contain detailed standards for FRPs.

Facility Response Plans

The most site-specific plans required by federal law are FRPs, because they contain detailed plans and requirements for particular facilities such as individual oil refineries and oil pipelines. Since not all onshore facilities are large and not all of them pose a threat of discharge into water, only facilities that could inflict “substantial” harm on the environment by a discharge into waters are required to submit FRPs. FRP’s must:

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- + be consistent with the NCP and ACPs and SACPs;
- + identify the individual who has full authority to implement the FRP and required immediate communication between this individual and federal and private spill response resource providers;
- + identify, and ensure by contract or other means, the availability of private personnel and equipment necessary to clean up an oil spill “to the maximum extent practicable;” and
- + describe the training, equipment testing, drills, and response actions to be carried out under the FRP.

These FRPs are initially prepared by the facility’s owner or operator. Where a facility could reasonably be expected to inflict significant and substantial harm, the appropriate agency must review the FRP and, if it is in compliance with federal standards, approve it.

The Oil Pollution Act does not specify which agencies oversee spill response planning for different types of private facilities, but rather leaves this to Presidential discretion. Pursuant to Executive Order 12777 (October 18, 1991), the Department of Transportation (DOT) reviews and approves onshore pipeline FRPs, the EPA reviews and approves FRPs for onshore non-transportation facilities (such as oil refineries), and the U.S. Coast Guard (USCG) reviews and approves vessel and certain coastal facilities that transfer oil to or from vessels. Each of these agencies has promulgated regulations to implement its responsibilities.

Federal agencies may require amendments of submitted plans that are not in accordance with federal standards. Facilities that do not have approved plans are not allowed to operate until a plan is approved. Facilities may operate only if they are in compliance with their plans. To provide agencies time to review and approve plans, a facility may operate for up to two years after submitting a plan if the owner or operator certifies that it has the private personnel and equipment necessary to respond to the maximum extent practicable to a worst-case spill.

PHMSA's Facility Response Plan Regulations

PHMSA's FRP regulations for oil pipelines are contained in 49 CFR Part 194. These regulations exempt certain smaller diameter or shorter pipelines, define which pipelines are required to have their FRPs approved by PHMSA, describe regulatory standards for FRPs, and describe PHMSA's approval process. Since all long, interstate, large diameter pipelines could reasonably be expected to inflict significant and substantial harm, as a practical result PHMSA is required to approve the FRPs for all such pipelines.

Due to the length of interstate pipelines, PHMSA's regulations require that the plans be based on delineated "response zones." Section 194.5 defines "response zone" as follows.

Response zone means a geographic area either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide, spill response capabilities. The size of the zone is determined

by the operator after considering available capability, resources, and geographic characteristics.

As can be seen, the regulations allow operators to define their own response zones based on certain spill response factors. Since the CWA § 1321(j)(5)(D) requires FRPs to be based on worst-case discharges, Section 194.5 defines "worst case discharge" as:

Worst case discharge means the largest foreseeable discharge of oil, including a discharge from fire or explosion, in adverse weather conditions. This volume will be determined by each pipeline operator for each response zone and is calculated according to § 194.105.



Thus, worst-case discharges must be determined in light of fire, explosions, and bad weather, all of which may impact the extent of damage caused by a pipeline rupture.

With regard to “response resources,” Section 194.5 defines this term as:

Response resources means the personnel, equipment, supplies, and other resources necessary to conduct response activities.

Whereas PHMSA’s regulations do not contain any mandatory equipment standards for the FRP’s it approves, the USCG regulations provide USGC personnel with meaningful detailed standards for evaluation of USCG-approved FRPs.

It is remarkable that PHMSA’s FRP regulations do not contain detailed standards for equipment or personnel needed to respond to oil pipeline spills, because determination of the sufficiency of response equipment is not a simple task. It appears that PHMSA allows pipeline companies to define for themselves the extent of their response zones and the type, amount, and location of response equipment and personnel needed to respond to these discharges, but then provides no meaningful standards that would allow PHMSA staff to determine whether or not pipeline operator FRPs are in compliance with the Clean Water Act.

The National Wildlife Federation report, *After the Marshall spill: Oil Pipelines in the Great Lakes Region*, provides a slightly different view: it focuses on the Great Lakes region, and, importantly, describing the opportunity available to states under the Oil Pollution Act to impose independent oil spill planning requirements. The National Wildlife report closes with a series of policy recommendations, including improvements in oil spill response planning regulation. For those of you interested in the full report, it can be found [here](#). Below are some short heavily abridged sections from this report.

Spill Response Planning and Reporting

Responsibilities under the OPA are split between several federal agencies. The EPA and Coast Guard direct the area planning. For inland zones, EPA designates areas, appoints area committee members, requires that information be included in area plans, and reviews and approves the area plans. The U.S. Coast Guard does the same for coastal zones such as the Great Lakes. While the OPA establishes very broad requirements for area plans, each region’s area committee identifies the locations that are sensitive to oil pollution. In turn, this informs the response planning for facilities within each area committee’s footprint. PHMSA is responsible for reviewing the facility plans of onshore transportation facilities, including oil pipelines, to ensure that they are in compliance with the OPA and area plans.

PHMSA requires operators to determine the potential worst-case discharge scenario by calculating maximum figures for response times, release times, and flow rates. Additionally, the plans must identify environmentally and economically sensitive areas, divide responsibilities among federal, state, and local responders, and include procedures for spill detection and mitigation. PHMSA’s regulations allow operators to incorporate by reference appropriate procedures from their PSA-mandated manuals for operations, maintenance, and emergencies into the OPA-mandated facility response plans.

In 2012, Congress directed PHMSA to maintain copies of the most recent response plans and provide copies of the plans upon written request to interested parties, although PHMSA can withhold or redact information for security reasons.

States may impose additional requirements for facility response plans under the OPA as long as the requirements are at least as stringent as the federal standards. Several states—notably Washington and Alaska—have developed spill response requirements mandating public participation. Washington requires a range of response plans, from contingency plans for facilities, pipelines, and vessels, to geographic response plans for regions. All of these plans require a 30-day public comment period. Additionally, geographic response plans are reviewed periodically in public workshops, and the public may submit comments. The Puget Sound Partnership works with a broad range of stakeholder groups and makes annual recommendations to the legislature regarding spill response plans. Alaska uses a similar model, and the state has tasked Regional Citizens' Advisory Councils with developing broad-based plans to accelerate spill response efforts and build regional consensus.

Shortcomings of current PHMSA Spill Response Planning

The Plains Justice report points out a variety of concerns with the PHMSA regulations governing spill response planning, and in the full report goes into great detail comparing the Coast Guard, EPA and PHMSA regulations, concluding that the other federal agencies provided regulatory standards giving “meaningful detailed standards for evaluation” of the submitted plans, and the PHMSA regulations do not. The PHMSA website indicates essentially the same conclusion in offering an explanation as to why operators may have had difficulty in developing initial spill response plans under the OPA that could obtain approval:

“Unlike the other OPA 90 regulations developed by other federal agencies with responsibility for carrying out the statutory provisions of OPA 90, 49 CFR 194 has a less prescriptive and more generalized regulatory requirements.”
PHMSA website, [here](#).

In a field where operators must create multiple plans that are reviewed by separate agencies, and when some agencies have identified specific standards for adequacy of these plans, entered agreements as to the protocols for reviewing plans so that there is consistency across the agencies, wouldn't it benefit the PHMSA staff responsible for plan review and the operator staff responsible for preparing these plans to have meaningful detailed standards for evaluation?

Unlike on other topics, where the PHMSA website contains a wealth of information available to the public, on the topic of oil spill response planning under OPA, the PHMSA website provides very limited useful information beyond access to the regulations and heavily redacted copies

Here's what a spill response plan looks like from PHMSA

PHMSA posted a redacted (partially blacked-out) version of the ExxonMobil response plan for their operations in Montana, including the Silvertip line that crosses the Yellowstone River. You can download that plan here: [LINK](#)

of plans. There is no readily apparent information about the protocols used to review spill plans, no information about whether there are plan review protocol agreements with other agencies, no current information about tabletop planning exercises planned or completed, no information about how the location or operators for those exercises are chosen, no information about the status of response plan approvals or rejections or updates by state or by operator, no information about which states have enacted oil spill response planning requirements, no information on the protocols PHMSA uses to review and approve or reject plans, no information, beyond a passing reference in a well-hidden PowerPoint presentation to any plans for integrating response plans into other PHMSA inspections. There is a summary of a 1999 review of the OPS process for approving spill response plans, and two advisories to operators (one following Deepwater Horizon and one following the Enbridge spill in Marshall Michigan) but very little more recent to indicate whether any organizational or procedural changes have occurred at PHMSA.

Before 2012 it was difficult at best for the public to obtain copies of the facility response plans from PHMSA. In 2011 Congress included a requirement in the reauthorization bill to make spill plans publicly available, although it also provided PHMSA with the discretion to redact certain parts of the plans. Unfortunately, PHMSA has fully exercised that discretion, so the plans found on the PHMSA website are missing most of the parts that a concerned member of the public would find necessary to build any confidence that the plans are adequate to protect their communities: maps, worst case discharge calculations, whether high consequence areas have been properly identified. The policy adopted by PHMSA outlining their decision to redact the plans can be found here:

http://phmsa.dot.gov/pv_obj_cache/pv_obj_id_0AA466EC79FB9187A2FF4464B9BA67AC8A9B0200/filename/Facility%20Response%20Plan%20Policy%20-%206-25.pdf

The directory of redacted spill response plans can be found here: <http://www.phmsa.dot.gov/pipeline/oil-spill-response-plan>

While we hold out hope that PHMSA policy will change to allow additional information from the plans to be made public, we don't expect that to happen anytime soon. However, even without releasing any additional information specific to any given plan, PHMSA could improve the public confidence this program by improving this piece of its website, including the protocols used for approving plans, the dates of submission and approval of updates or revisions, the frequency and type of coordination with other plan approval agencies, by using the plans to require scheduled and unannounced drills on the plans, by including any information about inspections on these plans, and by completion and public release of the program audit called for by the NTSB more than 4 years ago.